THE

CALCUTTA REVIEW.

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ART. I.—1. *The Weatherbys: Father and Son.* By JOHN LANG.
2. *Too Clever by Half.* By JOHN LANG.
3. *Oakfield; or Fellowship in the East.* By W. D. ARNOLD.

SINCE Mr. Macaulay set a notable example of *not* noticing the works which he cited as the subject of a Review Article, several writers, both in England and India, who, we are bound to say, have not reminded us in any other manner of Mr. Macaulay, have succeeded in imitating him in that particular. To follow even a good example is not always satisfactory: to follow a bad one is apt to be humiliating; and this is the penalty that we propose to provoke. By so doing, we do not mean to infer that the gentlemen whose books are named above are not worthy of the most careful critical consideration; we simply mean to infer that they have had it. It is too late to pronounce a verdict when the judgment has been delivered; and as both writers have already been condemned to that delightful species of literary transportation—being extensively read—we have no desire to enter an appeal against the sentence.

Among the things that we do *not* propose to discuss, we may also add one or two questions referred to in the above works, which have already caused an amount of cavilling equally unprofitable to all concerned. We prefer to deal with what is more pleasantly suggestive in these volumes, and to notice a few peculiarities of Indian life, which would present themselves most forcibly to one not too familiar with them.

There are many doubtless among our readers who are more at home in this foreign country than in their own land; who scarcely remember the sun but as a natural enemy; who accept the most *outré* modes of life as matters of routine, and the most obsolete phases of opinion as the spirit of the age. To these, how much that is moving around them must be lost to the sight:

how much of the moral to be drawn from it must be missed by the sensations! And who, despite the experience which should always obtain respect, and the authority, it may be, which never fails to command it, would not place more reliance upon the observation of one who, without either experience or authority, should possess a vigorous insight not yet obscured by habit, and an acute comprehension not yet deadened by details?

These remarks may be less new to a great many persons, than necessary to a great many others; for there is something in the vitality of an error that exceeds the nine lives of a cat. It has only to become steady to be respected, and only respected to be revered; while a fine dashing truth is apt to be classed as a dangerous companion, and to be stigmatized as an adventurer,—which it very often is, and a desperate one into the bargain.

It is mainly, then, from a home point of view, that life in India can be fairly estimated; and to fairly estimate life in India, every body knows that we must go beyond Calcutta. The north-west may be taken as a fair specimen, and it is to the north-west that we address ourselves. The month or two passed in Calcutta scarcely prepares the new arrival—fresh from Europe—from England—from London—for the phenomena presented by an up-country station. In London he was of course lost—to an extent which makes a great many persons particularly desirous of never being found again. He had also imbibed Paris, and tasted possibly of Vienna and Rome. Paris, he already began to feel might have grown into a passion, from which nobody was ever yet known to recover; and Vienna and Rome might have implanted themselves upon his nature, as habits at any rate, almost as bad as taking to a meerschaum—not very fascinating at first, but difficult to be dispensed with. From all these passing influences he is seasonably roused by the Overland journey. What new scenes and old associations—for one's early reading is all powerful—are conjured up by the mere idea! But the Overland journey is soon found to be a rush and a scramble, during which there is too much to see to permit one to observe, and too much to say to enable one to reflect. Calcutta is a crash and a glare, from which the new comer seeks refuge in silence and shadow, and finds them occasionally when he does not want them—under a punkah. The North West follows, and then come the stern realities of Indian Life. We pass over the dâk—who would not pass over the dâk if he could?—and find the new arrival at his station. He is probably in the hey-day of the cold weather; but he has of course a foretaste of his troubles. How dismal, for one who has so recently parted from "his friends,"—to find himself transplanted to a place which, for Asiatic *ennui*, combined

with European observances, has no parallel in any other country. An up-country station in India is an exception to everything. It reminds one of the desert, but wants its freedom. It suggests a foreign country, but imposes on us the cares of home. It exacts something of the etiquette of May Fair, but affords nothing of its varied intercourse. It is not like a country town, for it presents no facilities greater than the dâk for running away from it. It is not like a crowded city, for it does not allow one to remain ignorant of one's next door neighbour. It is like nothing under the sun—an Indian sun of course excepted—but itself. It is a station—" only this and nothing more "—nor less.

The new comer of course feels and sees before he begins to experience and reflect. He feels that the weather is getting warmer every day, and he sees that he has now exhausted everything in the way of novelty which the place may contain. There is probably very little of natural beauty in the neighbourhood, and still less in the way of art which can be recurred to with pleasure. He may of course be cast in a station which is an exception in this latter respect, and if so he is a fortunate man. He leaves his cards of course upon the society. He exchanges a few words with the people whom he finds at home, when he most likely labours under a consciousness of having nothing to say ; and he finds himself " cutting " these same people when he meets them out, and continues to do so until he gets their faces by heart. He is asked to dinner here and there ; and through meeting the same faces so often at different houses, forgets occasionally, if he is at all absent, whose house he is in. The conversation for the most part is perfectly unintelligible to him. It abounds in terms and phrases with which he is unacquainted, and refers to persons whom he has never heard of, or not yet individualized in his mind. He sees two elderly gentlemen convulsed with laughter at some joke referring to a place called a " cutcherry," but what there is to laugh at he cannot make out. He puzzles himself in wondering what a cutcherry can possibly be. It is no doubt a slang term for something—he has read in Mrs. Mackenzie's book that people talk slang dreadfully in India. A cutcherry is probably some improper place—he has read in several books that the moral tone of society in India is very bad. Still, he wonders how two gentlemen can make such allusions in the presence of ladies, and is sorry to see that two or three of the latter are laughing as much as anybody. He will certainly write home and tell his friends about it : he feels himself already gaining an experience of the country. So he sits quietly, having transacted the necessary courtesy demanded of him by the young lady on his right, by making three observations—two sensible ones and a failure,—and receiving from her three observations in return—

two failures and a sensible one. Even this kind of conversation he has found it difficult to keep up. He cannot ask if she has been to the Opera lately ; nor is it of any use to say anything about the Chiswick Fête ; and he has not arrived at that degree of confidence—which requires middle age and immoveable features—which would enable him to ask, " which do you prefer, muffins or crumpets ?"—a question which we remember being put by a " bold bad man," in London, to an astounded female stranger. He has a half belief that the orthodox enquiry may be, " which do you prefer, the Regular or the Irregular Cavalry ?" but not being quite sure, does not hazard it. It may be therefore inferred, that his three remarks are limited to the weather and the dàk ; and then perhaps the weather again. He does not apply himself particularly to the dinner, for he has not courage to ask in public for what he wants under their native names, and has been prematurely abashed by receiving a knife when he thought he had asked for a spoon—a kind of mistake which a great many persons in India think highly distinguished, and which indeed we have seen affected by persons, who, from certain indications of local coloring, we should say had known Europe only in the capacity of visitors. But of course our friend has not arrived at this triumphant point of experience. So he sits quietly ; looks up at the punkah ; mixes his wine rather injudiciously ; takes notice of the ladies' dresses, if he is critical in such matters, and wonders what his sisters, whom he has seen six weeks before in the first blush of the last mode, would think of them. He looks too at the gentlemen's dress, decides that there is not an orthodox collar at the table, and wonders where the civilians get those extraordinary coats. Then he looks up at the punkah again, and only half listens to the conversation. He starts fervently on somebody addressing him, and has a suspicion that he has been—only for an instant—asleep. Then there is a buzz, and the ladies leave. The principal difference made by this event is—that the ladies have left. There is very little accession to the conversation. It is just a little more free perhaps. A subaltern for instance informs his immediate neighbour that his commanding officer is an ass ; and our friend hears for the first time that a distinguished Colonel of Cavalry, with a name high in public estimation, cannot ride :—" You should see how he grasped his holster pipes yesterday—it was a rich treat." This is the extent perhaps of the license : very little more wine is taken, and there is not so much sitting over it as even in England in these decorous days. The remainder of the proceedings are soon over. Nobody is going anywhere else, except a bachelor or two to a mess perhaps ; and these light up furtive cheroots in the verandah, and mount, it may be, dog-carts of a flagrant character,

which they could not very well keep waiting for them in Mr. Thackeray's "dearly beloved Baker Street."

A few weeks pass over, and our young friend has become an old Indian. It is wonderful by the way what an old Indian one becomes in a few weeks, and what a young Indian one remains in a few years. But he is an old Indian in his own estimation, which is sufficient: if everybody only succeeded in satisfying himself, there would be no necessity to please others. He knows his own servants by sight, which is a great triumph, for at first all the natives resemble one another like a flock of sheep. He can also ask for what he wants with tolerable facility; has got a house all to himself; has tried a hookah, which he will abandon when the novelty has passed, as nearly every body does now, and begins precociously to abuse the country. Of course these symptoms are heightened or modified by circumstances—whether he is a military or a civil service "Griff," or neither,—and in either case he may fall into extremes, either of books or billiards, and be successful or unsuccessful in life, according to the chances common to all climates and conditions.

But our Griff is not beginning to moralize as yet. He is looking about him, and is prepared to make the best of everything he sees and hears. His first mania is most probably for amusement. He knows every body in a formal manner, and has made a few intimate acquaintances—these are manufactured in a few hours in India. He is determined to rush into the Vortex of Society—to give himself up to the giddy whirl for a time, before he takes seriously to study—which he has several times resolved to commence "the first thing on Monday morning," and has then postponed to the first of next month—by way of beginning in a regular manner. He is ready for the rush, but where is the Vortex? It is plain that he will not find it by staying at home, so he resolves to go and call upon some of the leaders of fashion, and hear what is going on. At the first house where he makes the enquiry, he receives the well known answer that there is nothing at all, and that everything is more dismal than ever. Are there no balls coming off? This question causes absolute laughter. Why, there has been no ball since the Queen's birthday, and there is no chance of another. The last was a failure, because the Brigadier insisted upon full dress, and the officers were too hot to dance; and because it had been "got up" by two or three of the wrong people; and because Mrs. A——'s box, which she had been expecting for seven months from England, had not "come up," and she had no ball dress, and therefore stayed at home; and because Mrs. B——, whose box *had* come up, and who had a beautiful ball dress, wasn't allowed by her husband to dance; and because Mrs. C——, who was the best dancer in the

station, took it into her head to sit still all the evening, after filling up her card about six times over; and because the D——s, who were always interfering with people's amusement (it's very fortunate they have left the station since), chose to give a dinner party on the same night, and detained their guests until they were thoroughly fatigued, with the exception of a desperate youth or two, who would go anywhere at any hour; and because several ladies stayed away for reasons of their own, and several other ladies stayed away for reasons of somebody else's; and because the refreshments were bad; and accordingly nobody enjoyed themselves except the gentlemen who stayed to the second supper, and they paid dearly enough for their amusement the next day.

This is not cheering. But our Griff, still bent upon rushing into the Vortex of Society, is not daunted. He speaks to two or three influential men upon the subject of a possible ball—there are always two or three men in a station who manage these matters. The first application is encouraging. Captain Warble thinks that things are not "ripe" for the purpose, and besides, is of opinion that the civilians ought to "do something" this time, and that "some of those fellows who are drawing four or five thousand a month" ought to *give* balls instead of making people subscribe for them. Our Griff next proceeds to Rapid, a subaltern, who is always ready for anything. He has always a good following in whatever he proposes, and is a general favorite. Rapid is evidently the right man, and Griff finds him in the right place—i. e., at home. Rapid is just taking his first cheroot of the day (and his last but two, for he is not one of your dissipated men) and thinking of Miss Myrtle, the Judge's daughter, whom he has met out the night before, and in whose favour he is understood to be a "gone coon"—in the objectionable phraseology of some of his friends. She has on that occasion expressed her wish that somebody would "get up a ball," and he is just meditating upon the subject. The suggestion of Griff is therefore singularly àpropos. They agree to go and rout up old Warble, and make him join. The result is promising. Warble is open to conversion, and (after tiffin) is of opinion that the thing may be done if the Browns and Joneses can be induced to come, and the Robinsons can be guaranteed to stay away. Rapid is not a man to be daunted; so without more delay he gets a sheet of foolscap, and writes the proposition for a subscription ball neatly at the top, with a request that those disposed to join will put down their names, or at any rate not omit to write the word "seen." Then he puts the important document, big with the fate of so many Polkas and Deux Temps, into a long envelope, with the words "In circulation" written outside, and a long list of names, and hurries off with it in his buggy, to

get the signature of the Brigadier and some "big Civilian" to head the subscriptions—for though the virtual originators of the festivity, it would be death to the design were either of our three friends to assume the lead. These preliminaries are soon achieved—the "Brig." merely observing that he does'nt care much for these things, but will make a point of going, and the big Civilian putting his name down without dreaming of being present, but with a vague notion that he is doing something for "the masses," and that property has its duties as well as its rights. The severe test is to follow, and this, as fortune wills it, is successful. Some fifty or sixty persons put down their names, and of these about half may be expected to bring ladies. Of course these are all persons of recognized position in society, and who know more or less of one another. But it may be that some are invited over from out-stations, to swell the number, and to give that appearance of strangers among the old faces, which conveys one of the most refreshing sensations that the Mofussil can afford, and is comparable to nothing but the first sparkle of the desert spring, or the first experience of any of those pleasant things of which poets delight to sing.

For the next few days, all the station who have subscribed to the ball are on the *qui vive* about their toilettes—except indeed the absurdly opulent people who have everything in fabulous quantities from home; and even they have occasionally to endure the misfortunes to which all in this life are subject—especially if they rely upon the bullock train. All the available gloves in the station are bought up, as the first preliminary, and there is a rush made upon the wretched milliner, who has been neglected for the last three months. The gloves are of course all of the wrong sizes—the white ones are spotted with yellow, and the yellow ones are stained with white, owing to exposure to the air, and it may be a dash of sea water, and at least half of them break disastrously at the seams on first being put on, through the same causes, joined to the dry heat up the country, which has operated as a pleasing variety. Now it is that ladies who have hitherto been remarkable for a degree of amiability of which "dovelike" conveys but a faint idea, begin to tell their husbands respectively, that it was all nonsense putting down their names, for they have nothing to go in, and they (the husbands) know it. A mild man, perhaps, out of the number, suggests some existing dress which does not seem used up—and which he thinks "rather swell than otherwise" as eligible at the crisis; but we need scarcely say that he is promptly put down, as his ignorant conduct deserves. As if indeed *that* thing would do, which every body has seen, and when the so-and-so's will be there, who give themselves such airs because they are just out from England, and the somebody-elses,

who have just got their box out, which is the next best thing! Of course the monster subsides, as in duty bound, and retreats to his own room, which presently begins to give forth a slight odour of tobacco, and from which a pop, something like the opening of a soda water bottle, is probably heard, accompanied by a splutter, the result of a furtive effort to open it gently—blundered of course by that ass of a servant! This, it should be remembered, is an individual case—we should be very sorry to represent it as a specimen of Anglo-Indian manners generally.

The great night arrives. Soon after, our friend Griff arrives also—at the public rooms where the ball is held, and where he is one of the first. The scene is not one of enchantment, such as he had imagined a ball to be in the gorgeous East—the land of the sun, of Birds and Flowers, and Jewels and Odours, and Houris fairer than all of these. There is an uninhabited look about the place, which can be accounted for only by the appearance being founded upon fact. The walls look white-washed—for the reason that they are so, and there is an air of desolation, which the presence of seven persons does not altogether dissipate. There are plenty of lights, however, and the canvass is stretched with admirable tightness upon the floor—signs of the activity of the stewards, and delightful for dancing purposes. It is half past nine. The seven persons who make desolation the more apparent, are all men. They are already courting the refreshments, and Griff joins them for want of something better to do. Presently a new party arrives—two of them are ladies. Then another party—one is a lady. Three is usually considered a quorum in the Mofussil, and the band begins to play. Scarcely has the first dance begun when two more parties, mustering five ladies, drop in with desperate vigour—and the ball is in full swing. Our Griff is in the Vortex of Society, and yields himself to the gay abandonment of the scene. More people arrive, including more ladies, until the number of the latter actually rises to seventeen. The men by this time at least half fill the rooms, and the enchantment is at its height. Up to the period of half-past twelve Griff experiences an unsettled feeling, as if the ball had only just begun; but when once he is certain that no more guests—ladies especially—need be expected, and he is assured on the authority of several of the stewards that the occasion is *not* a failure, he surrenders himself to sensations of mad exhilaration, and is determined to "make it a personal matter" with any man who says he is not enjoying himself immensely. Whether he *does* enjoy himself or not of course depends upon circumstances apart from the mere appliances and means of enjoyment. The most magnificent balls are usually voted "slow" by some of the guests, and the most hopelessly wretched occasions are found delightful by

others. At the ordinary Mofussil ball it must be confessed that there are difficulties to surmount of which few men are master. It needs considerable animal spirits to compete for a partner with twenty different men, and requires something approaching philosophy to feel perfectly contented after *not* succeeding, which must be the fate of nineteen out of the number. The probabilities are that Griff has not been sufficiently *au fait* to make his engagements before hand—which the old hands always do—and so succeeds only in getting a stray partner here and there, who has been neglected, or forgotten ; but let us hope that he enjoys himself, and is thoroughly satisfied that he is being carried away in the Vortex of Society.

The supper is not likely to be a brilliant affair. It is more useful than ornamental, and unfortunately very few persons wish to make use of it. However, the ladies let off cracker bon-bons, and laugh over the mottoes in the approved style, and sip champagne, and flirt mildly, and seem to like the proceeding rather than otherwise. A candid young person fresh from home will occasionally give out, in more or less marked manner, that it is not the sort of thing that she has been accustomed to, but every body, fortunately, does not hear her, so that the heretical opinion does not interfere with the amusement of the rest. At half-past one, or two, the people disperse, all heartily tired, whether with exerting themselves too little or too much, and perhaps the former is the more fatiguing of the two. A few unprincipled persons usually remain behind, and indulge in that most reprehensible proceeding—a second supper—which some hardened wretches are actually heard to declare is the best part of the evening. At these horrible feasts, not only are all sorts of devilled and anchovied arrangements freely indulged in, but beer is drunk, not wisely but too well,—in which respect it differs from the comic songs, which are sung neither wisely *nor* too well—an arrangement, however, which has its advantage, as it prevents the singer from being asked to sing them over again.

After his maiden attempt, our Griff is not likely to be in a great hurry to rush into the Vortex again, but is usually content with a whirl of mild amusements, which cheer but not inebriate. It is possible that a Dramatic fit comes over him, and that he yearns to fret his hour upon the stage. He has of course a notion that he can play Hamlet (we never knew an Amateur who didn't believe *that,)* and a latent conviction that he is born to be the best Richard upon the boards. He joins the Thespian Club of the station, on the strength of this understanding that he has arrived at—with himself. The delusion is very speedily dispersed, or at any rate he soon ceases to have any idea of acting upon it.

The fact is, that Shakespeare and the Legitimate Dramatists do not flourish in India. Nor is it surprising that they do not, when it is remembered that complete professional companies at home cannot make them popular with the public. Even in Calcutta, where an occasional professional or two come out upon speculation, for the apparent purpose of assuring themselves of the fact that it "doesn't answer," the strictly Illegitimate Drama alone affords them a chance. In the North West how is it possible that any serious or sustained performance can succeed, when the female parts are feminine only as far as the petticoats are concerned, and the softer sex is usually represented as rather the harder of the two? Even when a professional lady has "starred it" up the country, which has been very rarely, she has belonged as essentially to the "heavy walks" of the drama as the elephant at Astley's, and inclines to such parts as Mrs. Haller (our *bête noir* of the British stage) and can never be made to play in any piece in which she has not to be seduced herself, or do something desperate to somebody else. The consequence is, that these ladies have not been very successful, and few are found to follow in their footsteps. So the Amateur Companies get on by themselves as well as they can. Of these the greater numbers are composed of the soldiers of the European Regiments—of which nearly every one in India has its theatrical company. In some stations these coalesce with the officers and other gentlemen; in others, this latter class form a company by themselves. In the North West the buildings used for the theatres are sometimes built expressly for the purpose: in other cases they are old barracks, or any other convenient or inconvenient edifice, adapted to the purpose; and as may be supposed, they do not always remind one of Covent Garden and Drury Lane. The dramas represented—always strictly illegitimate, as we have said—vary according to taste. The soldiers invariably select a real Surrey melodrama, containing a profligate nobleman; a rapacious landlord, *i. e.* a landlord with a prejudice in favour of getting his rent; a faithful lover, in more or less humble life; a haughty lady of title who is found to have made a *faux pas* in her youth, and whose own son turns up eventually, minus his h's, but with most enlightened sentiments about the nobility of nature; a virtuous heroine who makes the profligate nobleman ashamed of himself; and a great deal of red fire, which eventually makes everything *coleur de rose*, as is usual when virtue is triumphant in real life. In addition to this, there is probably a "screaming farce," and as many comic songs and sailor's horn-pipes as can be crammed into the evening's entertainment.

Among the "gentlemen Amateurs" the farce, screaming or otherwise, forms the staple of the *repertoire*, except when such

a piece as "Used Up" (which piece has perhaps been played more often than any other in India) can be found available. But this is of course not often, for "Used Up" is one of the best specimens of its class ever put upon the stage. A writer in a home periodical—whose article we have happened to meet with while writing these pages—remarks with a profundity of observation worthy of a better cause, that it is always the weakness of at least one gentleman Amateur in every company, to believe that he can play Sir Charles Coldstream rather better than Charles Matthews. We have known instances in which two or three gentlemen belonging to one company have each held the same opinion; which of course leads to exhibitions of a far more professional character than anything the Amateurs can do on the stage. These aspirants are usually rather fresh from England, and possessed of the most recent coats and waistcoats, without which, it must be confessed, the character is apt to lose a great deal of *vraisemblance;* for it is evident to the meanest capacity among the audience, that the traditionary swell of the British stage, with the military stripe to his trowsers, whom the waiting maid usually finds so irresistible, is not the Sir Charles that Matthews has immortalized. We are bound to say, however, that we have seen the character admirably performed by Amateurs in the North West, and that whatever faults there might have been in their performances, were on the right side, as far as good taste is concerned. They generally *under*-played the part, refined too much, both in dress and manner—forgetting that a little breadth and exaggeration are indispensable on the stage. In fact they were too much like the Sir Charles Coldstreams of real life to convey the requisite dramatic effect, and their performance seemed *pale* behind the lights, just as their cheeks would have seemed pale had they not been rouged.

But we are criticising rather prematurely, it being our intention to take the reader to the theatre (in the company of our Griff) and let him judge for himself. The theatre to which we will conduct him is not one of the best in the North West, as far as the building is concerned. It is a fair average specimen, and therefore better worthy his attention. It is a condemned barrack, this home of the Drama, but it is not depressed by its condemnation, for it never looked half so well in its original character. Our distinguished party arrives early, in order to form a fair estimate of the place before the performance commences. "Early" means about half-past eight, the performance commencing at nine. Being strangers, of course we have been losing our way, and have nearly driven our buggy into a ditch; but the sounds of the commencing overture, and the light which streams from the open doors, have guided us in safety to the

spot. Outside there is a great concourse of vehicles and horses, the latter taken out and made comfortable for the evening—crowds of soldiers and mysterious persons who are never seen but on these occasions, and stalls for the sale of ginger beer and other unintoxicating refreshments, chiefly for the benefit of the soldiers. A great many of the gentlemen who have come *en garçon* have the materials for "pegs" in their buggies, with perhaps a basket of ice sent beforehand; and these persons, we need not say, are highly popular with their friends. Indeed their practice may be commended upon the strictest grounds of prudence, for they do more than prepare for a rainy day, by providing for a "wet night."

The interior of the theatre is, as may be supposed, of the Early Barrack Order of Architecture—that is to say, the room is long and straight—rather narrow for its length, but sufficiently lofty. The stage is at one end, and the seats are ranged across the room, divided by partitions into first boxes, second boxes, and gallery. The seats are all chairs, the private property of the individuals composing the audience, who have sent them from their houses during the day. They are carefully labelled with the names of their respective owners, and arranged according to their various degrees of dignity, unless in compliance with special arrangements. Of course the Brigadier and the Civilians of high degree get the best places, while the ordinary run of distinguished persons are planted promiscuously. This is as far as the first boxes are concerned. No class of persons are actually excluded from these places who choose to pay for them; but in India different classes are so separated generally by custom, that they separate themselves by instinct upon these occasions; and the distinction, not too strictly carried out, doubtless makes everybody more comfortable. So the second class of persons find themselves serenely content in the second boxes, where they can see just as well as in the first; and the soldiers and kindred subordinates make themselves uproariously at their ease in the gallery, where they can command the whole house. These various human elements being assembled, general attention is directed to the drop-scene, which, like the scenery generally, is rough and ready, and is probably the work of a private soldier. The subject is a view of a very blue bay with very yellow sand, and very green trees; buildings of a pleasing white; and a mountain thrusting itself ostentatiously out of the back ground, and emitting smoke. We need not the classic-looking peasantry in the foreground —one of whom is talking to somebody else's wife on the trunk of a fallen tree, another of whom is fishing and evidently not caring about catching any thing, and the rest of whom are sprawling miscellaneously in the shade—to tell us that Naples

is the bay and Vesuvius the mountain. We are just remarking the peculiar perspective which the artist has employed in the composition, and thinking that if nature was arranged upon the same principles, the bay would infallibly pour itself into the orchestra, and the mountain come toppling down upon the heads of the first boxes, when the bell rings and the curtain rises upon a "screaming farce."

The next moment we are in the presence of Buckstone. There can be no mistake. The appearance is unmistakeable, the voice beyond all dispute, and the conduct identity itself. No other man ever carried comicality of countenance to such a pitch; no other man ever made so much fun out of a weak voice; no other man ever allowed himself to be made such a fool of by his wife, or blundered with such an irresistible combination of shrewdness and inanity when he wanted to transgress upon his own account. The evidence of the play bill is to the effect that the character is played by Lieutenant * * * of the ** Regiment, but this anybody may believe who pleases—we believe the man to be Buckstone, and although temporarily shaken in our conviction by the man coming to the front of the house, when the piece is concluded, and sitting beside us, in a red jacket with the well known facing of the * * th, and asking us whether we will go to supper at the mess of that gallant corps when all is over, we are still under the impression that it *is* Buckstone, or else—which is the modification we submit to, the next morning—or else a very good imitation of him.

In the same manner we see Keeley. In the same manner we see Wright. All these men have their representatives—and very good representatives too—in India, among officers fresh from furlough, who have made good use of their evenings in London. We have seen Wright blunder more at sitting upon a lady's bonnet, or performing the other pleasant farcical feat of smashing a baby in a chest of drawers, than several officers whom we could name at station theatres in the North West. The proverbial cowardice of Keeley, too, (we are speaking of course in a professional sense,) we have seen emulated in India in a manner that most infallibly would have lost the actor his commission, had he exhibited it in half so natural a manner in his private life. The great difficulty, as we have said, is with the female parts. But it is wonderful—the way in which the difficulty is occasionally overcome. As regards "the men" it is of course difficult to make them very ladylike, but they contrive to be very like possible ladies, and although it must be confessed, they do not readily accommodate themselves to the nice conduct of Crinoline, and do make broad strides, and pitch their voices in an unseemly manner—still they accomplish most of the requirements of

female impersonation, with a degree of success that would scarcely be expected, and which is almost as much as is required for a broad farce. But the great success is attained when a clever Griff is caught for the purpose. It will not do to catch him too young, because he is then apt to be nervous, and although his "getting up" may be unexceptionable, he is apt to spoil the entire performance by running off the stage almost as soon as he has been dragged on to it. It is an unfortunate fact, indeed, that confidence seldom comes before whiskers, and that when a man is possessed of both, he will not always exhibit the one at the expense of the other. But when confidence developes a little in advance, and whiskers are not in his way—it is surprising how successful a female part can be made, despite the difficulties of sex. The performer of course lays his female friends under contribution for costume, and it is said, gets them to dress him occasionally—but this we don't believe. He certainly contrives to get dressed somehow, and often very well dressed. And we have seen gentlemen in India act in a more really lady-like manner than many of the "female parties" who are on the stage at home.

We need not further accompany our friend through the evening's entertainment, the nature of which the reader can form some estimate of by this time. The class upon whom it produces the greatest effect, is of course the natives; and it is to be feared that the European name is not elevated in their eyes by the exhibition. But we are fortunately strong enough in this country to endure any amount of contempt which may be incurred by military officers and solemn civil functionaries indulging in congenial buffoonery, just as we are enabled to brave the public opinion which looks upon dancing as somewhat infamous, when we do *not* do it by deputy, according to the Eastern custom.

The general habits of life of residents in the North West have been variously criticized, because they have been variously understood. The mistake usually made, is to select individuals, and to consider them as representing classes. We should no more take the model civilian, who spends ten hours a day in his cutchery, never smokes, drinks nothing stronger than a glass or two of champagne at dinner, and is ten years behind the age in his shirt collars, and general information, as a type of Indian Society, than we should take the traditional subaltern who has been so often described, who shirks every kind of duty, professional and social, as much as he can, and whose life is principally made up of "pegs" and promises to pay. We doubt whether these two popular objects of satire could ever be accepted as types, but they certainly cannot in the present day, when a marked improvement in the tone of society has taken place in India. It is true that

we do still meet with specimens of what we may call the "Country bottled" classes. The Civilian who has never been home, and who can talk nothing but shop, is still to be met with in the North West. Also the "pegging" style of subaltern, whose conversation is half Hindustani and half slang, and nearly all sporting, who has no chance of ever getting home, and whose great object in life is to qualify himself for sick leave to the hills, which he gets at last for a longer period than he expects. But it must be admitted that these specimens are not numerous, and that they are fast becoming more rare. As a general rule, society in the North West is at least as intellectual as the same rank of society at home, and despite dozens of reasons why it should not be so. The climate is of course the great difficulty, but we deny that it is the great demoralizer that some writers seem to imagine. Who has not read in English as well as Indian periodicals, a description of a hot day? The resident in the North West is usually described as getting up at daybreak; hurrying on his clothes and taking a gallop with a cheroot; calling in at the Coffee shop to talk shop and scandal; returning home to bathe, and breakfast off mountains of curry and fish and eggs, all jumbled together; looking in at his cutchery (we are supposing the case of a Civilian) for an hour or two, and knocking off some routine business; returning to a tiffin consisting of piles of turkey and ham, curry and rice, washed down by unlimited beer, qualified with sundry glasses of sherry; then going to sleep for a couple of hours; waking up in time for the evening drive; returning with just strength enough to dress and dine off more turkey and ham and curry, washed down with champagne, perhaps, instead of beer; and immediately afterwards going to bed under a punkah. Descriptions which we have read of the lives of Military men are even worse than this. In a recent work it is asserted that after parade, when his work may be considered over for the day, the usual practice of an officer of the Indian Army is, to bathe, and dress of course: then to breakfast heavily, then to undress deliberately and go to sleep, after a mild attempt to read a volume of the Parlour Library; to wake up at one or two o'clock to a heavy tiffin and a fabulous amount of beer; then to undress and go to sleep again, this time without any such apology as the Parlour Library; to rise and dress for the inevitable evening drive, and to return again to a heavy dinner, and bed almost immediately.

We need not enter into elaborate speculations upon the probabilities of such a mode of life being adopted by a gentleman of only moderate intelligence, under any circumstances of climate and confinement. But we ask any of our readers in the North West, whether they are accustomed to spend their days in the manner

described? They will inevitably answer that they are not. We ask them, then, how many of their friends or acquaintances they can point to, as coming within the category? We doubt whether they can point to any whose habits even approximate to those stated to be general in the North West. As for any man's habits answering *literally* to the description, the notion is mere nonsense. But it should not be forgotten, that the above is meant to apply to the steady and respectable officer of the Indian Army, a married man perhaps. Who, after that, can describe the habits of the dissipated specimens of the class? The last attempt of the kind has just been made in a popular periodical at home. The article has already been so well described by a North West journal, that we cannot do better than follow our contemporary's account.

"Mr. Go-a-head Griffin, the hero of the sketch, is an ensign in the Seringapatam Slashers, quartered at Burragurrumpore. This station, we infer from its heat and the variety of corps quartered there, is intended for Cawnpore. At all events, it is some large cantonment, the seat of a Brigade, in the Upper Provinces. In large cantonments there is always something "going on," even during the hot winds. That something is certainly not much, but it might interest European readers. In the article before us there is positively nothing of the kind. Sleeping and drinking are the occupations of Mr. Griffin, and his twenty-four hours are so wholly eventless, that we wonder why a narration of them has been given to the public. Here is a summary of the article, and the reader may judge of it for himself.

"The hero, Mr. Griffin, is introduced to us in bed. A sleeping hero may make a fine picture, but not when he has been tipsy overnight, and musquito-bitten till morning. This is Mr. Griffin's condition, and he is, moreover, the victim of hideous dreams, caused by the wailing of a pack of jackals. This awakes him, and in starting up he knocks his head against the punkah. Of course he must have a cheroot after this. Further attempts to sleep are frustrated by the musquitoes, and the laziness of the punkah cooly. At last, Mr. Griffin, after vainly expostulating with that functionary as a 'sleepy son of an owl,' and a 'lazy, good for nothing black pig,' jumps up and gives him a sousing and a kick, which last operation merely hurts the inflictor's foot. The result of these annoyances is a glass of brandy-pawnee, which is the first 'tot' of the subaltern's eventful day.

"The brandy-pawnee, and castigation of the cooly, enable Griffin to sleep till gun-fire, when he is dragged to consciousness by his bearer. Griffin remonstrates, but the bearer is stern. The Fates have decreed that he must get up; and another minister of the Fates enters in the person of the khitmutghar, who brings a cup of tea. Encouraged by this assistance, the stern bearer forces on his master's

socks. Mr. Griffin, who appears to be a slave in the hands of his menials, is thus forcibly ousted from his bed, and is at last sent forth by the mandate 'your lordship's horse is at the door,' to parade. Thus, by the combined influence of bearer, khitmutghar, and syce, this officer and gentleman proceeds to do his duty.

"We have not space for the description of parade, but we perceive that Mr. Griffin performs the spirited manœuvre of sneaking round to the rear to escape notice. After parade he attends orderly room, and returns home, visiting *en route* a Parsee shop, where he imbibes a curaçoa 'peg.' This is his second dram before breakfast, which he preludes by a feast of mangoes. After an hour with his moonshee, Griffin dresses, and sits down to a breakfast consisting of 'curry, omelette, fish, rice, eggs, jam, and bottled beer.' After breakfast he discusses a cheroot, and quietly goes to sleep.

"The next episode is a round of visits. 'Tired of his own society, which he finds excessively stupid, Griffin orders his buggy, and determines to brave both sun and heat in search of a little excitement.' After the breakfast, and its antecedents, we are not surprised to find him, at the first house where he calls, 'hopelessly entangled in the furniture,' and 'upsetting a table in his way.' That he was ever admitted is indeed matter for surprise, for we should imagine most people to have been as tired of his society as he was himself. After his visits, he adjourns to the mess, where he meets a congenial character, Sponge of the Artillery, and having won a gold mohur of him, invites Sponge to tiffin. The tiffin consists of an awful 'devil' in which mustard, cayenne, Worcestershire sauce, West India pickle, and other irritating ingredients, are mixed. This awful compound is washed down with 'a cup' and some more brandy-pawnee. After this, Griffin, who is now reasonably obfuscated, proceeds to the band. We here get the following elegant *morceau* of description. 'Arriving at where the band is playing, he goes the round of the carriages *filled with lolling mem-sahibs*, dressed in mediæval fashions, and *looking rather* dissipated.' From these 'dissipated' characters Griffin works his way to the carriage containing the belle of the station, 'a handsome, overdressed girl, the only spinster for a hundred miles round.' This handsome overdressed girl is, however, destined to marry the Commissioner, 'a dried up old gentleman, who owns, lucky girl! lacs of rupees, and luckier still, an inflamed liver.' Why should a Commissioner be dried up, and why, of all men, should he own an inflamed liver?

"Last episode of all is dinner. It is a mess night, and Griffin invites his friend Sponge. Neither of them have an appetite, which, considering their 'devil' and its concomitants, is not surprising. Griffin makes a hearty meal of a quail roasted in vine

leaves, and prawn curry, while Sponge only feels himself equal to an ortolan and plantain fritter. The liquids, however, are done full justice to, especially by our two friends, who by the time of cheroot lighting are tolerably far gone. After dinner they indulge themselves with billiards, brandy-pawnee, and 'pegs,' and wind up with *vingt-et-un*, grilled bones, and iced beer, the result of which is, that 'Griffin' is put to bed by his bearer in a condition of utter helplessness, the united effect of heat and dissipation, where he will snooze away half the day in a miserable state, having taken the precaution the evening before, in expectation of a 'wet night,' to ask for leave from parade, on the plea of being indisposed, which he certainly was."

We agree with the writer in considering Griffin to be a vacuous young snob, and in indignantly denying that he can be accepted as a specimen of the Officers of the Indian Army. But none of our readers in this country require to be told that. The mischief which such gross caricatures do, is at home; and there, we have no doubt, the description of the vacuous young snob will be accepted as a correct picture of Military Life in the Mofussil. People in this country need scarcely be told of the many young officers who, so far from conducting themselves like Griffin, pass the mildest and most monotonous existence that can be conceived. There are in the Company's Army at the present moment, some of the most tremendous martial fellows, who would be a positive terror to the Civilians of an English country town, who are vegetating in this country not merely upon their pay—which is bad enough—but upon their pay "cut" it may be, in half, in order to liquidate the cost of very excusable debts incurred at the outset of their career, or for the purchase of "steps," the benefits of which they enjoy only in the future. These young men—believe it or not as you please, young ladies in England, who imagine gaiety and profusion as inseparable from military life—these young men debar themselves from every luxury, and from nearly all enjoyment. They do not belong to the mess, or did not until they were compelled to do so, and now they spend as little money there as possible. They live in houses only half furnished, three or four of them together sometimes;—ride little tats which would make people in England laugh; do not subscribe to the Ice concern, nor to a mutton club, nor to a book club. They run up no bills in the station for those pickled pleasantries imported in tins from England. Their table is of the simplest, and even beer is not copiously indulged in. In nine cases out of ten when one of those notices of "something going on" is making the round of the station, they do not subscribe, but content themselves by writing the word "seen" after their names. A ball on the Queen's birthday perhaps brings them out; for they

have a great notion of matters of duty; and recognize such occasions as one of them. They accordingly involve themselves in an occasional affair of the kind (to the extent of some seven rupees eight annas) and think that they have "come out" amazingly. But these are red letter days in their lives, which are principally passed in getting up in the morning in time for parade, grinding away half the day at the native languages, dining early, and going to bed early, after a copious libation of weak tea. Once or twice a week, perhaps, they partake of this refreshment with a married officer of the regiment, who is going through a similarly prudent regime—a couple who not being able to "entertain," and whose society is not considered to repay gratuitous politeness, are seldom invited out by the big people, and live in a state of domestic mystery, which is additionally humiliating from the fact, that the outer world shows no curiosity concerning it. It is rather unjust to reputable and useful, if not brilliant and conspicuous, members of society like these, to be associated in the general condemnation of the class, by writers who have made the "extravagance and profligacy of Indian life" almost proverbial.

We have alluded but little to the Civilians—officially so described—who form so important a part of Society in the North West. They are of course included in the strictures of writers who have described that society; but of course, whatever their degree of importance, they are in a numerical minority, and are therefore not so concerned as their Military brethren in the verdict which has been from time to time passed upon it. The fact is, that the Civilians receive such large pay, and have so much to do, that they are not exposed in any way to the same temptations as Military officers. In a North West station they are generally found to be highly valuable members of society. Upon them devolves the principal portion of the duty of "entertaining," and as a general rule it must be admitted that they perform that duty most hospitably. It is, to be sure, a common complaint in up-country stations, that the festivities are usually confined to "heavy dinners"—a ball or a pic-nic being a rare exception. But it should be remembered that civilians are but men, and that they are seldom rich enough or important enough to entertain the whole station at once, until they have gained a gravity of years that renders the wilder pleasures less congenial to them than at a period when—they used to make the same complaints of other people. Nor is the weakness peculiarly Indian. People at home seldom give balls after they have ceased to enjoy them themselves, unless for some particular object. A public man is glad to increase his connexion and popularity. A private gentleman has a daughter or two to marry. These are among the main reasons why people give balls at home. In the North West, what public

man cares about popularity, except with the Government? His position is made. It will never be improved by his wife receiving crowds of people whom she joins with him in not caring about. A daughter or two to marry,—need a man of any position in the North West trouble himself to give balls on that account? Daughters to marry are rare birds indeed, and any one with the usual number of eyes, and who hasn't a hump, may (as Thackeray has said more generally) marry any man she pleases. The difficulty is to keep the suitors off. No: it is evident that "a party" in the North West that is not a dinner party, is the reverse of what political parties have been said to be—it is the madness of the few for the gain of the many, and it is not to be wondered at, that the few do not go mad more often than they do. This stern state of things is greatly to be regretted, because amid the heat and *ennui* of the Mofussil, pleasures become duties, in fact, and not merely in the sense in which the French say the English make them so. And any pleasures which do not consist in eating and drinking are grand discoveries, and should be cultivated and encouraged by every man. The *ennui*, far more than the heat, is the bane of up-country life. It is true that pig-sticking and shooting can always be found at convenient distances from most stations. It is true that there are always cards and billiards to be had. Sometimes sky races, sometimes archery. But with the exception of cards and billiards, these recreations are not to be had exactly when a man wants them. He cannot always drown his private wretchedness in pig-sticking. Perhaps he is not a pig-sticker, perhaps there are no pigs. He cannot always forget his yearnings after the ideal in going after birds. He may not be a shot, and there may not be any birds. In any case he cannot always get leave when he wants it. Cards and billiards have their temptations and dangers, and besides, may not suit a man's taste. The same objection applies more or less to sky races and archery. What is a man to do then? Read and improve his mind, it may be answered. True, but a man cannot be always reading and improving his mind. A pleasant state of things that would be, indeed, with every body so preternaturally intelligent, that one could never hazard a stupid remark. Why, conversation would be at a stand-still, and society at an end. Besides there are hundreds of men in either of the services, which mainly go to form society in this country, who do read, and read to very good purpose. Many of them gain distinction by these means, in authorship or otherwise. And there are many more who have ample qualifications for doing so, and who remain mute inglorious Miltons, for want of a motive to be anything more. As far as society is concerned, however, they do good work. And considering the proportion of men of high talents and attainments

scattered about the country, and who are at least equal in number to the "Country bottled" class of the old school, it seems rather hard that the popular impression of the "tone" of society, has not been taken from the one class rather than the other. But it is certainly a matter of right that the society should be judged by the majority of its members, who though not exactly belonging to either of these classes, are yet just as clever and cultivated as the same rank of persons at home.

It is certain indeed that a great change has taken place in India of late years, in nearly everything. That the change has been for the better, who will deny? The advancement has been mainly caused by facilities of communication with home. It is being extended by facilities of communication with different parts of this country. The Electric Telegraph was a great step. But with all our respect for the "diffusion of ideas," we cannot blind ourselves to the fact that people do *not* communicate ideas by Electric Telegraph, never did, and never will do. They do not even communicate information, unless it concerns themselves, or unless they happen to be newspaper correspondents. No: they send messages to tailors to send them up coats, and they send messages to merchants to send them up beer. They send messages to tell their friends of births or deaths in which they are concerned, and messages of all kinds bearing upon their personal affairs. But this is scarcely the "diffusion of ideas" which is here talked about. That object is performed infinitely better by the Post Office, unless the ideas happen to be accompanied by money, (which it must be confessed they seldom are,) in which case they are apt to be stopped in their circulation, and that which was "meant for mankind" given up to a subordinate official. The great diffusion of ideas will be accomplished through a strictly material agency. The Railway will be the great regenerator of India—of the Provinces of course more than the Presidencies. What man will appreciate the privilege of telegraphing to his tailor, when he and his tailor can so soon be made to meet? What man will concentrate his gratitude upon the electric fluid for signifying that he is thirsty, when his beer can be brought to the bosom of his family, as with the stroke of some enchanter's wand? The diffusion of *men* will include the diffusion of ideas, and is the only real way of diffusing them. Of course when we say men we mean women—not as a difference but as an addition, and this brings us to a subject upon which we have ventured to touch but slightly hitherto.

Some of the critics of Indian Society have been very severe upon the female portion of it. One says that they swear, another that they drink rum. We are not quite sure that these are the precise charges brought against them, but we have cer-

tainly read something equivalent in Mrs. Colin Mackenzie's book. Need we enter into a defence of our countrywomen in India, who do not differ from our countrywomen at home in any respect, but in finding themselves in a warm climate, and in endeavouring to accommodate themselves to it in as amiable a manner as possible? We know that there have been Military ladies, who would call themselves by their husbands' titles when they have an opportunity for describing themselves officially, in dâk bungalow books, and such places. We know that there have been Civil Service ladies, who took upon themselves the dignity of their husband's offices, and talked most alarming shop. But these monstrosities must have been pensioned off some time ago, for it is certain that we do not meet with them now. These remnants of a barbarous age have passed by, and in place of them, we have ladies with the last French bonnets, the last English ideas, and who actually marry for love, occasionally, in the European style. It is true that there is still a notion existing in England that gentlemen in India send home for wives, and have strangers brought out to them, whom they marry with great docility, and live with, until the wives run away from them, that is to say for three months or so. But what does it matter if people in England choose to believe in nonsense of the kind? It amuses them, and it does no harm to the subjects of their oriental imaginings. All observant people in this country cannot but see that there never was such a country for happy marriages, a country where the life of the husband and the life of the wife are so bound up together, and that this is peculiarly the case in the North West. Marriages are made up suddenly, to be sure, in India; but, considering how well they usually turn out, the fact is all the more in favour of the state of society which admits of such precipitation. It is amusing enough to hear of the marriage, in the Mofussil, of people who have been acquainted for a month or two; of the singularly little ceremony attendant upon the event; and of the lady going home to the husband's house, whilom his bachelor's den, instead of the couple scampering about for a month as if they were ashamed of themselves, according to the modest English custom. But we ask any fastidious person who may object to the proceeding, what he would have substituted in its place? If the lover waits until he knows the lady more, somebody else, who knows her less, will probably snatch her up, and he will not be much the gainer by his delicacy. And as for going on a wedding tour, we would simply ask the fastidious person to get the bridegroom leave to go in the first place—to find him a place worth going to in the second place, and to pay the expenses of the journey in the third place. For ourselves, we are quite contented in the assurance that marriages in India—made in all the strange ways that they are—do some-

how succeed: and after that fact, we have the utmost contempt for anybody's opinion upon the point. Railways somehow led us to the subject of marriages. They will of course be immense promoters of that institution; and in their influence in this respect alone, we shall be able to find a cure for the only real disadvantage (after the climate) to which residents in the North West are liable. When Railways are in full operation, there will be no excuse for even the most susceptible of men making mésalliances—which some few of them (very few it must be admitted) are apt to do at present. Every man will be able to go to the Presidencies and choose from the latest arrivals—if they will have him; and so keep up the "tone" of society, and the purely European character of the race. Indeed the improved means of transit will have such an effect in bringing strangers into the Provinces, that journeys to the Presidencies will be seldom required for such a purpose. And who shall describe the general effects of this influx of strangers into the Provinces? We are not discussing politics at present, and shall refrain from describing the effects ourselves. But we do not hesitate, at the same time, to declare our belief, that those effects will be of a character, for a description of which "tremendous" is a mild term, and "highly beneficial" an insulting form of coldness.

ART. II.—1. *Selections from the Records of the Bengal Government.* No. VII.

2. *Electric Telegraph Manual.* By W. B. O'SHAUGHNESSY, M. D., F. R. S., &c.

3. *First Report on the Operations of the Electric Telegraph Department in British India—From 1st February,* 1855, to 31*st January,* 1856.

4. *Anglo Indian Telegraphs.* By C. C. ADLEY, C. E., &c.

THE early history of Electricity, like that of others of the experimental and phenomenal sciences, is lost in mists of conjecture. At the first dawn of philosophy, vague indeed were the ideas and theories regarding a power, mysterious in its nature, and apparently imbued with a divine essence. More than twenty centuries ago Thales the Milesian philosopher discovered that *electron* or amber, when subjected to friction, exhibited the property of attracting feathers and light substances. We doubt if the venerable savant, when announcing the simple fact to his admiring disciples, was in the least degree aware that he had given to the world the first hint of a great power, which in after ages would minister to the refinements and necessities of civilization in a most marvellous manner. Whether the new power was of divine origin, or the amber was possessed of a soul or an evil spirit, were questions which, in those dark ages of superstition, naturally agitated the human mind, and struck even the learned with awe. The necromancer seized upon it as a valuable medium in the practice of his mysterious arts, and employed it to increase and strengthen the too popular belief in his communion with supernatural agents. The hoary headed priesthood employed it to work on the superstitious fears of their believers, so as to terrify them into abject submission. Centuries however rolled away before the plain unvarnished tale of the Greek philosopher disclosed any sign of further developement. From the announcement of Thales to the discovery of the Leyden jar, science looks on a vast and lamentable void of upwards of two thousand years.*

The invention of the Electric Telegraph may be said to have been dimly shadowed forth from the remotest antiquity. Without being irreverent, may we not fancy that we find an allusion to it in the book of Job, when from out of the whirlwind the question is asked "can'st thou send lightnings that they may go, and say unto thee, here we are."† Tradition also

* Thales 600 B. C.; Leyden jar 1746.

† Job XXXIII. 35.

appears to have handed down some vague prophetic allusions to the future wonder of a wonder-teeming age. Three hundred years ago the Elector Frederic of Saxony is related to have had a strange dream. The Monk Luther appeared to him writing with an iron pen on the door of the Chapel Royal at Wittemberg, and the iron pen which Luther handled was so long that its feather-end reached Rome, and shook the Pope's triple crown on his head. The Cardinals and others ran up to support the tottering tiara; but in vain. The iron pen now handled in London reaches to Turin and Genoa; when it has been extended to Rome will it not shake the Pope's triple crown?

Poetry also appears to have contributed its quota in anticipating a means of instantaneous correspondence. In the "*Prolusiones Academicæ*" published in Rome in the year 1617, the author (Famiano Strada) refers to a plan of corresponding by magnetic agency, mentioned in a Latin dramatic poem purporting to be illustrative of a pageant got up in Rome by Leo the 10th. In this poem various eminent scholars of the time spoke poetical pieces of their own composition, in the character of the most celebrated poets of antiquity; and in the part ascribed to Cardinal Bembo he says metaphorically, that he could make two lovers correspond at any distance apart by means of magnets affixed to desks with the letters of the alphabet inscribed thereon. Each of the two lovers was to have a magnet and a desk similarly inscribed, and these magnets, although separated a great distance apart, would have a sympathetic influence on each other when either was touched. An indicator was to be fixed on the desks, and by means of the sympathetic influence of the magnets, and a prearrangement between the correspondents, the indicators could be made to point simultaneously to any desired letter of the alphabet, and thus the correspondence be maintained. Strada in concluding his remarks, and supposing the plan feasible and accomplished, breaks out into the following amusing rhapsody, which would almost make one suppose that he had a special view to India, as he represents the great advantage of this mode of communication to consist in its freedom from such casualties as the robbing of the dâk, and the delay occasioned by swollen torrents:—

> O utinam hæc ratio scribendi prodeat usu!
> Cautior et citior properaret epistola, nullas
> Latronum verita insidias, fluviosque morantes.
> Ipse suis princeps manibus sibi conficeret rem:
> Nos soboles scribarum emersi ex æquore nigro,
> Consecraremus calamum magnetis ad oras.

At the present moment, although we have not yet sacrificed our pens, nor, literally speaking, are able "to waft a thought from Indus to the Pole," nevertheless modern science has given

us the control over a power whose results practically developed will eventually eclipse the wildest dreams of the poet, and the most extravagant fancies of the philosopher.

Passing from the domain of speculation, poetry, and dreamland, we will glance at the first crude ideas practically employed to accelerate intercourse between distant places. In the primitive ages the blowing of trumpets, beating of drums, and lurid glare of beacon fires, were the only available means of rapidly conveying intelligence afar. "Blow ye the trumpet in Tekoa, and set 'up a sign of fire in Bethaccerem; for evil appeareth, out of the 'north great destruction!" was the command of Jeremiah when he warned the Benjamites to gather themselves together to flee out of Jerusalem. At a later period, at the downfal of Troy, Agamemnon ordered fire-signals to be lighted, to publish abroad the fate of the ten years' struggle. Still later, when after the conquest of Gaul, Cæsar effected a landing in Britain, the beacon fires which at midnight flashed from hill to hill summoned our sturdy forefathers together to join in common cause to repel the invaders. Scotland too adopted a similar plan t give warning in cases of political danger. The "Border Beacons" which crowned the various hill-tops, formed a line of telegraphic communication with Edinburgh, and when an enemy was expected one bale or blazing faggot gave warning of their approach; two bales that they are "coming indeed" and four bales blazing beside each other that they are "coming in great force."

The above methods, however, were merely temporary, and only adopted in cases of emergency or fierce political excitement. The earliest practicable project for regular intercourse was that proposed by Dr. Hooke in the year 1684. He suggested the employment of "masts and yards," but no encouragement being given, the plan was never carried out. Subsequently came Guillaume Amontons, who proposed the following plan. In a series of consecutive stations persons were stationed, who by means of telescopes having perceived flags or other signals at a preceding station, transmitted them to the next, and so on in succession to their destination. Each different signal corresponded to a letter of the alphabet, the key to which was known only at the terminal stations. This proposal was also neglected. Then followed Marcel, who meeting with no encouragement, broke his machine, burnt his drawings, and died without revealing his secret. About the same time appeared Linguet, who while a prisoner in the Bastille, invented a telegraph which he offered to construct in exchange for his liberty. His efforts also were fruitless. Among others who were investigating the subject at the same period, may be mentioned Bergstrasser of Haynau, who

tried every branch of telegraphy; but his mind being confused with a variety of plans, nothing was accomplished. Finally we find that we must yield to the French the honour of having constructed the first useful telegraph, and this was the Semaphore Telegraph invented by the brothers Chappe. Their plan was very simple. The signals were conveyed by means of arms or levers placed in various positions, for instance, an arm in an upright position signifying A, a horizontal position B, and so on. The signals were easily read off at a distance by means of telescopes. A similar plan was afterwards introduced into England, but has long since been abandoned from its inutility. It was subject to frequent interruptions from fogs, gloomy or rainy weather, and on the average it was found to be available for only one-fifth of the whole year. The brothers Chappe were remarkably favored in the introduction of their Semaphore Telegraph. An experimental line was constructed under the auspices of the French Government, and its opening was inaugurated by the announcement of a victory. The first message ran thus, "Conde is recaptured from the Austrians." To which the assembly replied "The army of the north is well deserving of its country." These messages interchanged during a short space of time determined the adoption of an invention wonderful for the period; numerous watch towers sprang up throughout the country, and the system was speedily established.

Although it would be very interesting to trace the gradual developement of the science of electricity, and its kindred science magnetism, from the earliest ages to the present time, our space is too limited to notice more than what bears directly on the subject before us. We must pass therefore from the primitive discovery of Thales to that of the Leyden Jar, as this last appears to have originated the idea of employing electricity for rapidly communicating intelligence between distant places.

Soon after the discovery of the Leyden Jar, Dr. Watson, Bishop of Llandaff, transmitted a discharge through a distance exceeding four miles without any loss of time, although a great part of the circuit was formed of land and water. Subsequently Winkler at Leipsic, and Le Monnier at Paris, repeated the experiments, and the success attending them suggested the idea of employing statical electricity for telegraphic purposes.

The history of the Electric Telegraph is divisible into two distinct eras, the Electrostatic and Electrodynamic,—very hard words doubtless to the general reader, but very simple when explained. By Electrostatic we mean all telegraphs in which statical electricity, or electricity produced by friction, is the exciting agent. By the term Electrodynamic we mean telegraphs

in which current or dynamic electricity, *i. e.* electricity produced by chemical action, is the motive power. The difference between the two electricities may be thus popularised. Statical electricity shews a great tendency to dart off from its conductor to any other conductor that is adjacent; dynamic electricity always remains with the same conductor, unless some other conductor absolutely touches it; statical electricity darts along in sudden gushes, and is like the precipitous dashings of a mountain torrent, while dynamic electricity pours itself out in a continuous stream, and is like the steady and onward flow of the broad-rolling Ganges.

We have tabulated in chronological order the various plans of telegraphing by statical and dynamic electricity, so as to enable the general reader to form a succinct and correct idea of the subject. The first table comprises all telegraphs in which statical electricity was employed, as follows :—

Inventor.	*Date.*	*Plan and Remarks.*
Odier	1773	Odier appears to be the first person on record, who conceived the idea of employing electricity for telegraphic purposes; no definite plan however is given. He merely states that he could send messages to a distance of 5,000 leagues in half an hour. The idea appears to have occurred to Odier, by a word accidentally dropt at the table of Sir John Pringle, when Franklin, Priestly and other scientific men were present.
Lesage.....	1774	Employed 24 wires connected with 24 pith balls suspended by threads. Each ball represented a letter of the alphabet. On exciting an electric machine, and joining it to one of the wires, the pith ball of the electrometer belonging to it was repelled, and the motion signified the letter intended.
Lomond	1787	Considerably improved Lesage's plan by reducing the 24 wires to one.
Betancourt ...	1787	Transmitted messages between Aranjwez and Madrid, a distance of 25 miles. The details of his plan have not transpired.
Reiser	1794	Proposed employing illuminated letters. Small pieces of tinfoil were placed at short distances apart on squares of glass in the shape of the letters of the alphabet. When a discharge was sent the desired letter became visible in a brilliant succession of sparks.
Cavallo	1795	Proposed to employ detonations for calling the attention.
Salva	1796	Constructed a telegraph at Madrid, but no description has appeared.

Inventor.	*Date.*	*Plan and Remarks.*
Ronalds	1823	Employed a circular brass disc on which the letters of the alphabet were engraved. The disc revolved behind a screen, in which was a small aperture sufficient to disclose only one letter at a time. When the desired letter was visible a discharge was sent, and the collapse of the pith balls at the opposite terminus showed that the letter then visible formed a part of the message.

None of the plans mentioned in the foregoing table were ever put into execution; some of them, though very ingenious and beautiful, failed in the elements necessary for practical success. It is to the electrodynamic era that we must look for some satisfactory results, as the nature of the electricity employed in this is much more tractable, if we may use the expression, than in the previous case. The discovery of electrodynamic electricity was effected in a most singular manner. Professor Galvani having accidentally discovered that the muscles in a dead frog's leg could be excited into motion when acted on by the electric machine, instituted a series of experiments which promised to lead to a full development of the nature of nervous action in the human system, and of the origin of muscular motion. These experiments induced the professor to propound a theory, in which the hitherto hypothetical agent which passed under the name of the "nervous fluid" was set aside, and electricity was considered as "the vital principle by means of which the decrees of the 'understanding and the dictates of the will were conveyed from 'the organs of the brain to the obedient members of the body." This theory, although it dazzled the imaginations of scientific men, and fascinated physiologists, was opposed by Volta, who considered that the electric excitement was due to the mutual contact of two dissimilar metals, and that the muscles of the frog merely played the part of a conductor. The result of this controversy gave rise to the invention of a new source of electricity, which in courtesy to the inventor was called the Voltaic battery. This novel instrument rapidly created a new science. By its means were effected the most important discoveries in chemical philosophy, and by its aid we are now enabled to dart forth the lightning-winged message over forest-bound mountains towering in majestic grandeur, and across raging and pathless oceans.

We will now place before our readers in a tabulated form, the various plans proposed for telegraphing by dynamic electricity until some practical result was obtained. The following table, commencing with Sœmmerring and concluding with Morse, com-

prises all the various inventions prior to and relating to the actual development of the Electric—or as it should be more correctly called—the *Dynamic* Telegraph:—

Inventor.	*Date.*	*Plan and Remarks.*
Sœmmerring..	1811	Employed 35 Wires—25 to represent the letters of the German alphabet and 10 to represent the numerals. The letters were denoted by the decomposition of water which took place beneath the eye of the observer between gold points.
Schneeger ...	1812	Improved the above plan.
Wedgewood...	1813	Proposed writing by electricity, but the details of his plan have never been published.
Coxe.....	1816	Proposed to make signals at a distance by the decomposition of water and metallic salts, causing a change in colour to ensue.
Ampere	1820	Employed 35 Wires, the same as Sœmmerring, but substituted magnetic needles placed in coils of wire for the evolution of gases between gold points.
Baron de Schilling.	1833	Constructed a telegraph, which consisted of five magnetic needles and coils, the needles being set in motion by a key, an alarm for calling attention was also used. The Baron de Schilling died before his plans could be perfected.
Gauss and Weber ...	1834	Tried the principle of magneto electric induction on a magnetic bar for transmitting messages.
Alexander ...	1837	Followed out the same principle as Ampere, but used only 31 Wires instead of 35. He further made the improvement of letting the letters of the alphabet themselves become visible, by dropping small screens placed before them.
Wheatstone...	1837	Employed 5 needles and an alarm similar to the plan of the Baron de Schilling. The five needles were subsequently reduced to two, which comprises the telegraph now so generally used in England.
Morse	1837	Made use of the Electro-magnet for producing signals and employed only one wire. The signals were given by marks made on paper by a steel pen. This is the instrument now so extensively adopted in America, and about to be introduced into India to supersede the defective instruments now in use in this country.

On examining the foregoing table it will be observed, that the inventions first on the list were chiefly for producing signals by decomposition of water when subjected to electric action. It will also appear that the scientific world were constantly on the "*qui vive*" ready to snatch at every new discovery, and to seize upon any hint that might be thrown out advantageous to the introduction of a system of telegraphing by electricity. And strange to say, the philosophers who made the discoveries and threw out

the suggestions were not the persons who profited by them. While they discovered, others seized upon their discoveries, and turned them to profitable account. The discoverers appeared to place too light a value on the result of their investigations, and to have passed on puzzling and panting after more brilliant achievements.

In 1819 Professor Oersted started the science of electro-magnetism, by discovering that when a magnetic needle was placed above or below a wire, and a current of electricity was passed through the wire, the needle had a tendency to place itself at right angles to the wire. Scarcely had this discovery been made when Schweiger improved upon it, while Ampere at once applied it to telegraphic purposes, but without success. He employed 35 wires, and the consequent great expense was at once a barrier to the introduction of his plan. Twelve years afterwards the Baron de Schilling takes up Ampere's plan, improves upon it and reduces the number of the conducting wires to six. Death however suddenly cuts short the Baron's projects; five years later Alexander, Wheatstone and others are investigating the subject. Alexander employs 31 wires, but is unsuccessful. Wheatstone revives the plan of the Baron de Schilling, employing six wires only, and succeeds. Steinheil at the same time, by employing magneto-electric induction as the motive power, and discovering the use of the "Earth Circuit" reduces the number of the wires to two. Wheatstone immediately reduces the number of his wires to two, and the Telegraph in its wondrous simplicity startles the world!

Contemporaneously with the above investigations, other scientific men were engaged in pursuing the same subject, but were following a different course of research. While Oersted discovers electro-magnetism, and Arago, observing the magnetic properties of the electric current, finds out the attractive power of soft iron, Sturgeon constructs an electro-magnet, and notices the increased power to be obtained from it. Professor Morse immediately appropriates the electro-magnet to telegraphic purposes, invents an instrument in which only one wire is required, the American Government aid him in his plans; and his efforts, like those of his colleague Wheatstone, are crowned with success.

Scarcely had it been publicly made known, that the practicability of the Electric Telegraph had been demonstrated by actual experiment, that a means of instantaneous communication which had hitherto baffled all the powers of scientific men, and been ridiculed as only the dream of the poet and enthusiast, was now an unquestionable fact, when a host of competitors for the honour of the priority of the invention started up—nor is it to be wondered at that such an array of claimants should have so suddenly appeared on the arena, because a splendid discovery or invention

is not the achievement of one individual, but the result of the combination of the researches of a number of persons, all pressing forward with the same prize in view. Hence when the triumph was announced, all those who had directed their attention to the subject advanced their claims for distinction. Were we to venture an opinion on this *vexata quæstio*, we would say, that if the honour were due to the man who first conceived the idea, we would go centuries back to the unknown bard who ascribed the metaphorical language to the lips of the fictitious Cardinal Bembo. If the honour were to be given to the man who first constructed a practical telegraph, then the Baron de Schilling deserves the palm. If again, the distinction belongs to the person who first constructed a telegraph, and proved its feasibility by scientific reasoning and practical experiments, then we must award the prize to Professor Wheatstone. With regard to Professor Morse's claims, we regret we cannot advocate them. At the same time, very great credit is due to the learned professor for the ability and energy displayed in establishing a system of telegraphs over the American continent. Nor must we here omit to bestow a full meed of well earned praise upon Lieut. Cooke, to whose untiring energy and indefatigable zeal, Professor Wheatstone is so much indebted for the establishment of the electro telegraphic system throughout the United Kingdom.

Since the construction of the telegraph in 1837, up to the present time, numerous patents have been taken out for various inventions, nearly all of which are more or less modifications of the plans already enumerated. Some professing to be improvements are not really so, while others display considerable skill and ingenuity. Where there is so much excellence it would be invidious to particularize, and though we are not disposed to go so far as some in the expression of our opinions, we consider that many of the modifications and improvements are well deserving of the eulogies they have called forth.

It will not be altogether out of place here to give a cursory resumé of the principles of the telegraph. The elementary principles which comprise the telegraph are extremely simple and may be recorded thus.

1st. It is necessary to have a circle of conducting matter, whether of metallic wire, moistened pack-thread, or any other conducting substance, before a current of electricity can be generated or transmitted. It is a singular fact that the generation of electricity implies its transmission, as the operations are mutual; one cannot take place without the other.

2nd. A combination of any three elements, viz. of two different metals and one liquid, or two different kinds of liquid and one metal, is absolutely necessary for the development of the elec-

tricity employed as the *primum mobile*, in the electric and electro-magnetic Telegraph. This combination is called a galvanic battery.

3rd. The wonderful property possessed by electricity for transmitting itself through insulated conducting circuits to almost any given distance in an indefinite short period of time.

It will be observed that we have made no mention of the mode of producing electric action in the magneto-electric Telegraph. In this instance no battery is used, the electricity being produced from the magneto-electric machine, but as no such form of telegraph is employed in India, or likely to be, at least for some time, we will confine our observations to the system at present adopted, and the American system, which it is intended to substitute shortly for the one now in use.

Taking the before mentioned three axioms as the fundamental bases for the production of an Electric Telegraph, we will endeavour to give a clear explanation of its construction and manipulation. The system of Telegraphs adopted in this country differs very little in its broad principles from that so extensively adopted in England. The difference is chiefly in the mechanical details, and is said to be productive of results highly advantageous to the Indian system. This however is questionable, and we will discuss the matter further on. The plan of instrument employed here is constructed as follows. Take an oblong ivory or wooden frame, about 2 inches long, 1½ deep and 1½ thick. Through the centre of this frame cut a hollow groove about 1 inch long and ¼ inch deep. Around the frame coil some fine silk-covered copper wire, and within the frame place a magnetic needle with a light index of paper pasted across it. Place a couple of horn stops so as to limit the vibrations of the index, and then adjust the above on a small square or oval table about 6 inches high and 9 inches long. Over the coil, &c., put a small square glass case, or a common glass tumbler, to prevent the index being moved about by currents of air. The above, to use Dr. O'Shaughnessy's words, "is in truth the original galvanometer of 'Oersted, invented in 1819, with a slip of paper appended to indi-'cate its vibrations."* Whenever a current of electricity is passed round the coil of wire in one direction, the magnetic needle with the index is moved simultaneously in the same direction. Whenever the current is made to flow in the opposite or reversed direction, the needle and index also have an instantaneous corresponding motion. The current sent in one direction is called positive electricity, and the current sent in the opposite direction is termed negative electricity. It is by means of these two elec-

* Telegraph Manual, page 103.

tricities, producing two motions of the needle in contrary directions, that the signals are distinguished. In order to facilitate and expedite the reversing of the currents, a Reverser is employed. The Reverser consists of a square box, in the four corners of which hollows are cut, and then filled in with mercury. The hollows are connected across diagonally by pieces of copper wire let into the wood. Over the box is fixed a brass frame-work, so adjusted that when the handle is moved on one side two steel points dip into the mercury cups on one side, and set free a current of, say, positive electricity. On moving the handle in the opposite direction, another set of steel points dip into the other two mercury cups, and set free a contrary current, say of negative electricity. By this instrument the deflections of the needle first on one side and then on the other can be made in rapid succession. The contrivance is the same as that employed many years ago by Magnus, with this exception, that mercury cups are substituted for brass nobs, an alteration which can scarcely be considered an improvement. Our apparatus, however, is not altogether complete. Another little contrivance, called a turn plate, is required in order to bring the Telegraph line at pleasure in contact with the battery, so as to send a message or receive one when desired. The turnplate consists of a small piece of wood, about 3 inches square, containing two small pools of mercury. One of these pools is connected by a wire to the battery, the other is joined to one terminal of the coil of wire, the second terminal of which communicates with the earth or water line. We must not omit to state here, that the battery which supplies the motive power can be made in a variety of ways. The one generally adopted in this country is composed of zinc and copper cylinders, with solutions of sulphate of copper and salt as the exciting agents. When it is required to signal to a very great distance, platinum wire is used instead of the copper, and nitric acid substituted for the sulphate of copper solution. It must also be observed that an alarm clock is often introduced for calling the attention of the signaller at a distant station, but this is generally speaking used only during the night to awaken the slumbering attendant. The whole of the Telegraph apparatus is now complete, and consists of the following five parts, viz., the Needle and coil apparatus, the Reverser, the Turnplate, the Battery and the Alarm.

The *modus operandi* is as follows—if we take one set of the above instruments and place them at one end of a long table, say A, and another set and place them at the opposite end of the table say B, and connect them together by means of wires so as to form a complete circuit for the generation and transmission of the electricity, we will find that on moving the handle of the Reverser at the A end of the table, say to the right, the needle at the B end of

table will be deflected in a corresponding direction. On reversing the motion of the handle at A say to the left, the deflection of the needle at B will also be reversed. If again, the handle at B be moved, the needle at A will be subjected to similar deflections to the right or left, corresponding to the direction in which the handle may be moved. If now, we suppose the instruments at the A end of the table to represent Calcutta, and those at the B end to represent Bombay, with two thousand miles of wire stretching between them, we shall then be able to conceive the adaptation of the principles enumerated and the practical realization of the Telegraph. The transmission of the messages is effected simply by the deflections of the needle to the right or left. From these two opposite motions an alphabet is formed, and although to the untutored eye, the matter appears at sight extremely difficult, the rapidity with which an experienced hand reads off the messages is sometimes astonishing. In many instances the messages have been read off faster than they can be written down. The alphabet, which is totally one of signs, is formed thus :—

A.—One beat to the left.
B.—Two ditto.
C.—Three ditto.
D.—Four ditto.
E.—One beat to right one beat to left.
F.—One ditto two ditto.
G.—One ditto three ditto.
H.—One ditto four ditto.
I. J.—One right one left one right.
K.—Two ditto two ditto.
W.—One ditto one ditto one ditto.
X.—Two ditto one ditto.
L.—One beat to the right.
M.—Two ditto,
N.—Three ditto.
O.—Four ditto.
P.—One beat to left one beat to right.
Q.—One ditto two ditto.
T.—One ditto three ditto.
S.—One ditto four ditto.
T.—One left one right one left.
U. V.—Two ditto two ditto.
Y.—Three to the right one to the left.
Z.—Four ditto one ditto.

As it is the intention of the Government of India to substitute the American system of recording instruments for the inefficient system now in use, our article would be incomplete if we omitted to notice the manipulation of the American plan. The motive power in the two systems is precisely the same, viz. the Galvanic Battery. The great difference exists in the mode of signalling. In the American instrument the messages are written or recorded by marks on paper. It may be thus described. Upon a small wooden frame is fixed an electro-magnet. The silk-covered wire wound round the electro-magnet forms, so to speak, a continuation of the wire in the circuit. The Armature of this electro magnet is attached to a small lever, which carries a pen or steel point at its opposite extremity. Under the steel point is a roll of paper,

set in motion by the aid of wheel work. When a current of electricity is transmitted, the magnet attracts the armature, which causes the pen to press against the paper. If the contact is made and broken rapidly by the finger key, simple points are traced on the paper; if the circuit is closed for a time the pen marks a line proportional in length to the length of time the circuit remains closed. If no current is sent for some time, the paper (which is constantly progressing) exposes a blank surface. By the combination of these points, lines and blank surfaces, an alphabet is formed in a way that the reader can easily understand.

It will be observed that the great advantage of the above plan over the one now in use, consists in substituting for fugitive deflections a permanent recorded sign. There is consequently considerably less liability to error, as the message is recorded at the receiving station in precisely the same manner as it proceeds from the sending station. There can be no chance of the reader at the receiving station reading off the message incorrectly, as is often the case in the needle telegraph, for there he has it before him, written in hieroglyphics it is true, but which can be perused quietly and correctly after the despatch is finished. If the sender makes a mistake, of course the mistake is recorded, but the error is detected with greater facility. Another prominent advantage is, that should the attendant at the receiving station happen to be away or inattentive at the precise moment when a message is required to be sent, his absence or inattention will not prevent the transmission of the message. The sender forwards the message although his colleague is not in attendance, and when his colleague arrives he finds that the despatch is all ready for his perusal. Great causes of interruption and delay are thereby removed, and business progresses with proportionate rapidity. A third advantage is, that the attraction of the armature by the electro-magnet creates an audible sound, and arrests the attention of the recipient when required. A fourth advantage is, that the constant vigilance so essential to the needle telegraph, and that close observation of the needle when the signals are weak (so highly injurious to the eye-sight) is entirely obviated. We might go on enumerating other advantages of the recording over the deflecting telegraph, but enough has been said to convince our readers of the propriety and importance of the changes about to be effected.

Reverting to the works which stand at the head of this article, we observe that the first three are published under the authority of the Government of India, and are from the pen of Sir W. B. O'Shaughnessy. Whoever has studiously perused the writings of that gentleman cannot but be struck with their careless and verbose character. Discussion is presented in its most attrac-

tive form, being clothed in eloquent and plausible language. Errors and contradictions, too, are so cleverly smoothed down, that we smile as we pleasantly canter over a lawn of flowery epithets. To the general reader, who seldom troubles himself to look beneath the surface of things, such a style of writing is captivating; but to those who are in the habit of examining for themselves, and after stripping off the redundant fineries of language, measure everything according to its exact worth, such profusion of diction in matters of business is unpalatable. The latter class of readers shake their heads, amused at the conviction that their author believes in the maxim of Talleyrand, that "words are given us to disguise our thoughts."

To substantiate the above remarks we need only turn to the writings already alluded to. We shall only notice a few points in vindication of our argument. At page 5 of the Records of the Bengal Government, No. 7, it is stated that in the Indian line **no** wire is used. "Instead of wire I employ a 'thick iron rod $\frac{8}{10}$ inch diameter, weighing one ton to the mile, 'the heaviest wire used elsewhere is 1 cwt. to the mile." This statement is incorrect; the wire in ordinary use in England weighs *four* cwt. to the mile. Then again at page 7, paragraph 14, the following comparison is made between the use of sâl posts and bamboos as supports for the telegraph wires. "Thus the comparative cost in 8 years would be as 'shewn in the margin 472 rupees per mile in favor of the bamboo. It should be added that the lightness of this kind of post, the abundance and ubi-'quity of its supply, the ease with which it is worked, and the 'rapidity with which it is placed, are all practical advantages of 'such real value that I am persuaded that were bamboos avail-'able in Europe no other supports would be employed."

Bamboos 200 per mile, ...	Rs.	32
Renewed say in every 2 years in 8 years ..	„	128
Cost of 200 sâl posts at 3 Rupees ...	„	600
Difference in favor of bamboos in one mile	„	472

The above estimate and exposition is unfair and delusive. If 200 bamboos are required to the mile, it does not follow that 200 sâl posts are required for the same distance. Good stout sâl posts, placed 20 to the mile, and procured at a cost of 8 Rupees each, would be amply sufficient. The cost of the sâl posts therefore ought to be on the outside 20 × 8 or Rs. 160 per mile, and not Rs. 600 as stated. The difference therefore per mile between bamboos and sâl posts would be more correctly Rs. 32 only in favor of the bamboo, instead of Rs. 472 as stated in the document referred to.

In the next paragraph, No. 15, Sir W. B. O'Shaughnessy states that, he still maintains his objections to the European and Ameri-

can over-ground system. It is well known how obstinately the Doctor contended with the late Col. Forbes against the suitability of the over-ground system for India, and yet the over-ground system is the system established throughout the country. Further on, at paragraph 56, when speaking of the characteristics of the instruments applicable to India, we read as follows: "I 'accordingly tried and dismissed successively the English verti- 'cal astatic needle telegraph, the American dotter, and several 'contrivances of my own invention most skilfully constructed by 'Mr. Cribble of Calcutta. Every thunder storm put the astatic 'needles *hors de combat* by deranging the polarity of one or both 'needles. The American temporary magnets became perma- 'nently polarized and ceased to actuate the markers. At length 'by August 1851, when incessant interruption of this kind had 'almost driven me to despair, I contrived the little single needle 'horizontal Telegraph now in use in all our stations, with which 'we work in all weathers without danger of interruption." So spake Sir W. B. O'Shaughnessy in 1852; in 1855 the worthy Superintendent is again driven by the Public to despair, and proposes to introduce the "American system and instruments of Morse, 'with some American hands to work them, by which our present 'line can transact over four times the amount of business it can now 'perform."* And so the once rejected American instrument is after all to supplant the little horizontal needle telegraph. We might go on, but "*cui bono?*"

The second publication mentioned at the head of this notice is intended as a "manual of instructions" for the subordinate officers of the Telegraph Department. It contains much useful information, but at the same time much that might have been judiciously omitted. More valuable and really practical information might have been condensed into much less space. The dissertation regarding the instruments and plans adopted in various countries is foreign to the subject, useless to the working man, and never perused by him except with a view of being acquainted with the contents of the book. Some of the detailed methods to be followed in the construction of the line are complicated and useless in practice, and never attended to except under the immediate eye of the Superintendent. The mode of insulation adopted is of an inferior description. One would have thought that after examining all the methods used by various countries, freely discussing their advantages and disadvantages, and pointing out their defects, a system of insulation superior to that used in any other country would have been invented for India. Such how-

* Letter to the *Englishman* 24th July 1855. Vide also "First Report on the operations, &c.," paragraph 42, page 10.

ever has not been the case. The mode of insulation is remarkably defective, not simply in the shape of the insulators, but especially in the mechanical arrangements for fixing them. Here is the plan.* A cap of galvanized wrought iron about 8½ inches high and shaped like a common conical zinc mug, is fixed to the top of the post by a cement of rosin and sand. A wooden arm or bracket 11 inches long, 4 broad and 3 deep, is fixed to the top of the cap by a screw bolt ½ inch in diameter. At both ends of the arm insulators are fixed, formed of brown glazed stone ware and in two pieces. The larger piece, shaped something like a cup, is placed on the top of the bracket, and the smaller piece on the underside.† A groove is cut in the larger piece for the wire to rest in, and on fixing the wire, the insulators and wire are held together by a hooked screw bolt passing through the bracket and screwed up to the insulator on the underside. This plan was intended to carry two wires, but from some cause or other the brackets are placed at right angles to the position originally intended, and instead of supporting the two wires one wire is supported by a double set of insulators. No cause for this alteration is assigned; but judging from the number of brackets we have seen ripped off from the iron caps after a storm, we should suppose that the method has not been found strong enough for the purpose originally designed. It must be borne in mind that the system of telegraphs in India was at the outset intended to be a double line. All Sir W. B. O'Shaughnessy's arrangements appear to have been made with that end in view. According to the "manual" three stages were to have been observed in the construction of the line. The first stage comprised the erection of a "flying line" with a single wire, the second stage consisted in "strengthening the flying line," and the third stage in erecting "the permanent double line." In a letter addressed to the ENGLISHMAN on the 24th of July, Sir W. B. O'Shaughnessy, after stating the amount of permanent line erected, goes on to say "but 'be the line as good as human skill can make it, a single line has 'been found inadequate even in fine weather to the occasional 'extra pressure of work which we have already experienced. To 'remedy this we must either erect a second line from Mirzapore 'to Bombay, place a second wire on the present posts (to which 'let me remark, *par parenthese*, there are insuperable practical 'objections,) or introduce the American system, &c." Now, at the

* See Manual of Instructions, pages 35, 36, 37.

† It would have been much better had the position of the two pieces been reversed. Had the larger cup-shaped piece been placed with the wire on the underside of the bracket, the rain would have been thrown off, instead of effecting any lodgement, and the insulation been more perfect. As now placed it presents a cup for catching the rain. The entire principle however is bad.

time of writing the above remarks, nearly the whole of the line between Calcutta and Agra, and Agra and Bombay, had been placed in a substantial and *permanent* position. Where then are the "insuperable practical objections," when from the outset all the arrangements were made for the *permanent* line to be a *double* one. We must confess that the comprehension of these matters is beyond the reach of our moderate capacity.

A portion of the "manual of instructions" is devoted to a notice of the instruments, &c., employed in different countries, and the perusal of these remarks leaves the impression that, in order to suit the peculiarities of this country, a simple and more sensitive form of instrument was necessary, (such as that introduced by Sir W. B. O'Shaughnessy) and that insulation was a matter of secondary consideration. With all due deference to the talented Superintendent, we would venture to differ in our opinion on this subject. The arguments defeat themselves. If insulation is a matter of secondary consideration, where is the necessity of instruments of a more sensitive character? If a cheap and simple form of instrument is so absolutely essential for the successful working of the telegraph in India, where is the utility of introducing the expensive American system? Then again, where is the originality in Sir W. B. O'Shaughnessy's telegraph? Is not the needle and coil apparatus "the original galvanometer of Oersted, invented in 1819, with a slip of paper appended to indicate its vibrations?"* Is not the Reverser a very slight modification of Magnus' Reverser, used with Oersted's galvanometer in the early telegraph experiments, and abandoned for subsequent improvements? Is not the turn-plate the only original invention, if it can be dignified by such a term? In fact, is not the set of apparatus now employed almost precisely the same as that experimented on years ago in Europe and abandoned for its inefficiency? Where again is the boasted superiority in the Indian needle instruments? Is it an advantage to have the apparatus divided into three distinct parts, the manipulation of which divides the attention of the signaller, and keeps both his hands continually employed; when the three parts might be concentrated into one, the attention of the signaller be confined to one instrument, and one hand disengaged for writing down the despatches? Is it an advantage to require two people to do the work of one? Is it an advantage to sit closely watching an horizontal needle, when by employing a vertical needle the signals could be distinguished at a reasonable distance, and the attention of the signaller awakened by the low audible sound created by the beating of a vertical needle against the stops? Is it an advantage to injure the eye-sight

* Telegraph Manual, page 103.

and health by too close application, when such evils can be avoided? Is it an advantage to have the needle so delicately poised that the vibrations and signals become confused together? Is it an advantage to have signals given by a "flutter or vibration"* when they can be more accurately distinguished by a distinct and well defined motion? And finally, is not this "flutter or vibration" the fundamental cause of the majority of the mistakes which occur in telegraphic despatches throughout India.

If one error has struck us more forcibly than another, it is the want of a matured and well-devised plan at the outset, in the construction of the telegraphs throughout India; and we are convinced that had the Government of India in the first instance taken the opinion of persons more experienced in telegraphic matters than Sir W. B. O'Shaughnessy, the East India Company's exchequer would have profited largely. Nothing perhaps brings this so strongly to our minds as the employment of screw piles for the base of telegraph posts. A more absurd application of a really useful invention in its way has never before come under our notice. Screw piles are all very well where required, but they are quite out of place when being employed as a base for wooden supports to telegraph wires. One great objection is, that the post is thinnest and weakest at the place where it ought to be thickest and strongest; as it is necessary to taper off the lower end of the post in order to make it fit properly into the socket of the screw pile. Another serious objection is, that if a stone or other hard substance comes in the way, the head of the pile is thrown out of the perpendicular, and the post of course, when inserted into the socket, assumes a slanting position. We might multiply objections, but we will dismiss the subject by stating a simple fact. Throughout the Punjaub, where screw piles have been used, the piles, instead of having been driven into the ground in the ordinary way, have actually been embedded in brickwork.

On perusing the "First Report on the operations of the Electric Telegraph Department in British India" we do not find any reason for modifying our opinions already expressed on the style of the author; on the contrary our convictions are strengthened. The same inconsistencies prevail. At page 8, we observe it stated that in consequence of much confusion prevailing on the Bombay section of the line, a circular was issued advising all habitual correspondents to use the line *as little as possible during the rains.*" Is this the result of the non-insulation theory? Otherwise whence the greater cause for confusion during the rains than during fine weather? At both seasons of the year, the wires, the posts, the batteries, the instruments, the manipulators and the

* Telegraph Manual, page 120.

working regulations are the same. Again at pages 9 and 10, we find a defence of a charge concerning the "wretched instruments and imperfect system" "used on our lines." The defence reads plausibly enough if we canter over the flowery lawn, but stop,—let us quietly examine the matter, and see what constitutes the pith of the argument. We will quote Sir W. B. O'Shaughnessy's own words:—"These (meaning the instruments,) have been cer-'tified by the highest authority in England to be capable of con-'veying 20 words per minute in first-rate hands *on a single line.* 'See Mr. C. V. Walker and Mr. Evans, Report "Indian Tele-'graph Manual," pages 130—131. We turn to pages 130 and 131 and read as follows (the italics are ours)—"The experi-'ment was tried in the presence of Dr. O'Shaughnessy, Mr. 'Statham of the Gutta Percha Company's works, and *A. D. Evans, 'Telegraph clerk at Dover, who stated he could without difficulty com-'municate and read at the rate of twenty words per minute by means 'of instruments of the construction adopted by Dr. O'Shaughnessy.*" Is "a Telegraph clerk at Dover" the highest authority in England? But perhaps Sir W. B. O'Shaughnessy alludes to Mr. C. V. Walker, the able and talented Superintendent of the South Eastern Railway Telegraphs. For the sake of argument we admit it—yet we have carefully read and re-read Mr. C. V. Walker's letter, and we do not find throughout, the *slightest allusion* to the capability of sending twenty words per minute by means of Sir W. B. O'Shaughnessy's instruments. Are we then to take the expressed opinion of a telegraph clerk at Dover, as the highest authority in England?

Sir W. B. O'Shaughnessy then assuming that "the highest authority in England" had stated that signals could be sent at the rate of 20 words per minute on the Indian instruments—proceeds to say at paragraph 38, "The English apparatus for a *double* line has practically only the same power, the average work being $21\frac{1}{4}$ words per minute." Now this mode of reasoning is fallacious. It is not fair to compare the *average* work done on the English lines with the *best* work done on the Indian lines. If justice is to be fairly meted out, then let the comparison on both sides be on equal terms. The actual speed of operation in India is, according to the report, as follows. The best signallers in India, who are equal in rapidity of execution to the best in England, can only read at the rate of 18 words per minute. Many can only read 4 and 5 words per minute. This, says the report, practically reduces our daily power of transmission to a value of about 7 words per minute. Now then mark the comparison. The *best* work done in India is at the rate of 18 words per minute, the *best* work in England is at the rate of $24\frac{1}{2}$ words per minute. The *average* work in India is at the rate of only *seven* words per

minute, while the *average* work in England is at the rate of 21¼ words per minute. That is to say the *average* work in England is performed at *three times* the speed of the *average* work in India. Here also observe another anomaly; the telegraph clerk at Dover, says the report, can signal at the rate of 20 words per minute, while the best telegraph clerk in India, who is quite equal to him in despatch, can signal only at the rate of 18 words per minute. But we can prove the fallacy of the arguments in another way. We take the overland bulletins of the 10th of March, 1856, consisting of 562 words, and find upon analysis that the number of the vibrations of the needles necessary for the transmission of the whole despatch is as follows :—

By the Indian single needle telegraph	8083 vibrations.
By Wheatstone's double needle telegraph	4906 vibrations.
Difference,	3177 vibrations.

Hence it appears, that to transmit a message of 562 words, upwards of three thousand (or considerably more than one-third) more vibrations are necessary to be sent on the Indian instrument than on the English one. Consequently, if we consider that the operators in India are only equal in rapidity of execution to those in England, it follows *à fortiori* that it would take much more than one-third longer time to transmit a message by the Indian instrument than it would to send the same message by the English instrument. Having then proved from the report itself, that the *average* work done on the English and Indian instruments is as 21¼ to 7 respectively, having also proved that according to the excess in the number of the vibrations, considerably more than one-third an additional amount of time is occupied by the Indian telegraph, we ask where is the force of the arguments adduced in the report under review?

It would be as well here to call attention to the fact that in our remarks we have taken the best work done in England on the double instrument as 24½ words per minute, in order that our arguments may be conducted on Sir W. B. O'Shaughnessy's terms. But this is very far below the actual speed of signalling. We have known in England 25 words per minute sent by good hands, and 30 words per minute by the best. Long despatches have frequently been sent at the rate of 35 words per minute. The Queen's speech of February, 1855, was sent at the rate of 32½ words per minute. We fear, therefore, that were we to argue on our own terms, our case against the Indian needle instrument would be remarkably conclusive.

"A bad workman always complains of his tools" is an old and hackneyed maxim, another proof of which is elicited from the writings before us. We cannot go to such lengths as Sir W. B.

O'Shaughnessy, nor do we agree in the system of wholesale abuse dealt out to subordinates. All this we think injudicious in the extreme. There must be some radical error somewhere. A man must be driven to an extremity when he is obliged to descend to abuse in order to extricate himself from a difficulty. Besides, did not the workman fix his own market value on his tools, and if they turned out bad who but himself is to blame? How can it be expected to purchase a good article at a ruinously low rate? Raise the market value to a paying standard, and you at once get a serviceable article—your worth for your money. The market value we observe *has* been raised, but not in this country. Signallers are being brought over from England on terms which, if offered in this country, would secure young men of the standard required. We almost fear that the experiment of importing signallers from England will prove, like many other experiments, a failure. £120 a year may seem a large sum to a young gentleman in England, but on his arrvial in this country he will find his mistake. He will find that £10 a month will scarcely suffice to support him in respectability as a gentleman, surrounded as he will be on all sides by an artificial state of society. He may come out with golden dreams of the future, but when he discovers the real value placed on European labour in India, these dazzling visions (to say the least of it) will prove a delusive mirage.

Moreover the importation of signallers from England is an injustice to the Indian community. Is it just, we ask, to offer low wages in this country, then complain of the inefficiency of the workman, launch out a sweeping condemnation against the entire East Indian community, and try to remedy the evil by importing signallers from Europe at higher rates of wages? Is it just to raise the market value elsewhere, without first trying the effect of raising the market value on the spot? Is it just, and will it be a fair competition, to give the Indian community the disadvantages of low wages and defective instruments, and then compare their merits or demerits with those of European signallers, enjoying the advantages of higher rates of pay, and instruments embracing all the most modern improvements? While pondering over these matters it seems but a natural conclusion that it is fortunate that the Superintendent of Government telegraphs has an elastic exchequer to draw upon; that the East India Company can afford to squander money; and that the Indian Government do not look to deriving any revenue from their lines of telegraph.

Taking the Report in its length and breadth, we must admit that, as regards matter, it is bulky enough; but at the same time it savors very much of book-making. We confess that we have been very much disappointed regarding it. On opening the volume we expected to find an elaborate scientific treatise, replete with sound and useful information. Imagine our disappointment

on discovering but little really useful and readable matter, and much that is valueless. The volume might have been well condensed into one-half its present size, and still have retained all its most serviceable information. The remarks on the qualifications and failing of subordinates had no need to be inserted. It is a breach of faith with society, and had such a publication made its appearance in England, it would have been emphatically denounced with indignation. The Report on the state of the line, such as it is, should have been omitted. Who cares to know that the 5th and 12th posts from "Indore are angles; the wire requires to be placed round the back of the 12th post and bracketted," or that "the 10th post split—13th angle" and so on. Such information is all very well for an inspector's note book, but there is no necessity to foist it on the public. We hope and sincerely trust that when Sir W. B. O'Shaughnessy appears again in print, he will endeavour to vindicate his fame, for we can assure him that his writings hitherto have anything but enhanced his reputation.

We may be considered harsh in our strictures. We may be thought too severe in our remarks on the writings of a man who has been applauded by the entire press of India. But even that press has wavered in its opinion, and we flatter ourselves that our readers will admit that this discussion has been conducted with fairness and moderation. When a man pushes himself before the public, he must expect to be judged by that public, and measured by his worth. We should not therefore be true to society, or true to ourselves, if we glossed over faults from favor or preference. We gladly accord to Sir W. B. O'Shaughnessy all the praise and credit that is his due; we admire his perseverance and enthusiastic zeal; we believe him to be a splendid schemer, but we are certain that he is deficient in judgment, business tact, and cool administrative ability.

The last work we have to notice is a brochure by Mr. C. C. Adley, the Superintendent of Telegraphs on the East Indian Railway. The subject on which it expatiates is exciting great attention at the present moment. It refers to the establishment of telegraphic communication between England and India. The subject appears to have been dwelling on the author's mind for some time, for we have lying on our table a letter addressed by the same gentleman six years ago to the late Sir Archibald Galloway, then Chairman of the East India Company. This letter not only advocates telegraphic communication between England and India, but also points out the advantages to be obtained by establishing a system of telegraphs throughout India. To Mr. Adley undoubtedly belongs the credit of having originated the idea of telegraphic communication between England and India, which is now being carried out. Even the route suggested by him as the best has been adopted. But to return to the

brochure, we must observe that the question is well opened out, and in a few pages the author "has condensed most of the facts necessary to a comprehension of the scheme." It would seem that the project is not so formidable as it appears at first sight. On the Indian side we have telegraphic communication complete between Calcutta and Bombay, and the line will shortly be connected with Bombay by a line through Mooltan to Kurrachee. On the European side telegraphic communication is complete between Varna and London, and will shortly be completed as far as Constantinople, if it is not so already. There will therefore only exist a break between Kurrachee and Constantinople, of about 3,000 miles, being 1,000 miles less than the amount of telegraph constructed throughout India within two years. The only difficulties that present themselves are political ones, and these are in a fair way of being overcome. A company has already been formed for connecting the European telegraphic system with Bassora at the head of the Persian Gulf, and the East India Government have pledged themselves to connect Kurrachee with Bassora as soon as the former work is accomplished. Everything therefore is combining to press forward the great work. Before three years are over, Calcutta may be exchanging messages with London in six hours; the poet's dream will pale before the scientific reality, and lifting our hands in astonishment we may exclaim—"Verily we live in stirring and marvellous times."

There is one point, however, which we must not omit to notice; and that is, that when telegraphic communication is complete between London and Calcutta the difference in the longitude will create some confusion. When it is six o'clock in the morning in Calcutta it will be midnight in London. When our friends at home are in profound sleep, we shall be just thinking of rising. If we allow a message three hours to travel to London, and suppose a message leaves Calcutta at 6 o'clock A. M., it will arrive in London at 3 o'clock A. M., or three hours before it left Calcutta! A system of uniformity of time with regard to the telegraph will therefore have to be established, or we shall have to make an allowance of six hours in all our calculations. Double sets of signallers will of course have to be established along the line, in order that the work may be kept up without cessation day and night. But be that as it may, let us all, as far as we are able, contribute our mite to the accomplishment of this great end. When, ere many years are over we are borne along the Euphrates-valley Railway to England in twenty days, or along the "World's highway" in ten, while our thoughts are flashed along the telegraph wires in as many minutes, we shall begin to feel ourselves so close at home that we shall cease to consider our separation from our mother country as "an honourable exile."

ART. III.—1. *The Indian Penal Code.*

2. *Speech of the Hon'ble Mr. Peacock in the Legislative Council, 24th January, 1857, on introducing the Criminal Procedure Bills.*

IT is now as nearly as possible twenty years since the first draft of a Penal Code for India,—that which is commonly called the Macaulay Code,—was presented to the Governor General in Council by the Commissioners who had prepared it. From that time to this, the subject, although it has slumbered, has never been allowed to drop entirely. No active measures have been taken regarding it, but the original draft has been receiving a series of amendments, additions and alterations, at the hands of successive Law Makers: and it has, moreover, from time to time come a good deal under public discussion.

There can be no doubt that good Codes of Criminal Law and Procedure, are much needed for India, and that the Government which provides them will confer on the country a very great boon, and one which will be appreciated by all classes. The existing state of the law is most unsatisfactory. The evil of it has been long felt, and of late years has rather increased than diminished. It varies with the color of the Criminal, or depends upon the nation he belongs to, or the district in which he resides. It is founded on no distinct principles recognized throughout, but is full of inconsistencies. It is in a great degree uncertain and undefined, wholly unknown to any except those whose profession or calling has compelled them to make a study of it, and very slightly known to them. Indeed it is not capable of being made known thoroughly to any one, for it is not reduced to any positive form, but is contained only in a mass of crude and indigestible Regulations and Acts, English law books, Hindu and Mahomedan law books, and the heads of certain wise men called the Mahomedan law officers of the Courts. In such a state of the law, it is not to be wondered at if in the attempts made by the Courts to administer it, we can find nothing but uncertainty, confusion, and error. Considering the quantity and heterogeneous nature of the work which they have to get through, this would probably be the case, even were they presided over by men whose education qualified them to deal with so difficult a subject, —but it is absolutely impossible that it should be otherwise when they are presided over by those whose education does not qualify them for such a task, and by whom what may be called the strictly *legal* part of a case is always treated as of little or no importance. We believe, though there are those who say they differ from us in this, that the members of the community

here, as elsewhere, possess within them that silent legal instructor, Conscience, who generally, in the case of the commission of the grosser crimes, teaches the offender that he has done wrong, and gives him about as much information on the subject as there is practically much necessity for! But except as to such portion of it as is taught them by their consciences, the criminal law is at present unknown to, and not to be learnt by, the mass.

We view then with the utmost satisfaction the introduction of the Bill which we have selected as the subject of this article,—provided always, that it is sufficient and statesmanlike in its provisions. We trust, that having once been actually brought forward in the Legislative Council, it will not on any account be allowed to drop, but be actually taken in hand and passed into law without delay, with the necessary alterations and modifications. The measure now introduced has been long promised: so long indeed that we had almost begun to despair of its ever seeing the light of day. It is moreover said, and with some justice, to have cost an enormous sum of money. But if, as the result of all these years of waiting, and all that expenditure, the country is at last put in possession of a Code which in practice is found to be really good, it will have great reason to congratulate itself, and to consider, that it has neither waited so long, nor expended so much money, in vain. A good Code of the Criminal law is a work of great value. It is also a work of great difficulty, and which cannot be perfected without both time and numbers; for when the object is to compose with the utmost possible accuracy a text which shall contain certain ideas, and exclude all others, that object cannot be attained surely, except by the united operation of various minds and various tempers, some of which may be struck by errors and omissions not perceived by others.

The "Indian Penal Code" was read in the Legislative Council for the first time on the 20th of December last, and has been referred to a Select Committee who will report upon it soon. While their report is in preparation, it may not be without benefit briefly to discuss the subject of the proposed enactment. The more discussion such a measure meets with before it is actually passed, the more likely it is to be complete, and to answer the purposes for which it is intended: and the discussion of it can hardly fail to be of the deepest interest to all classes, as it affects the personal rights and liberties of all.

The Penal Code, as it now stands, possesses in our opinion a great amount of excellence. For the most part it has well drawn the line between what is, and what is not, to be considered criminal,—defined offences, and distinguished them from each other,—and awarded punishments which are proper and duly proportioned to the offences to which they are attached. *For*

the most part, we say; for along with a great deal that is very good, it contains much that is bad both in principle and in detail, and that greatly requires either to be altered or struck out. Strange as it may seem, much of what we object to most, is not to be found in the original Macaulay Code, but has been introduced in the course of its passage through the various hands which have during the last twenty years been allowed to work upon it.

The heads or chapters into which it is divided are twenty-three in number. Chapter 1. Introductory. 2. General Explanations. 3. Punishments. 4. General Exceptions. 5. Principals and Abettors. 6. Offences against the State. 7. Offences relating to the Army and Navy. 8. Offences against the public Tranquillity. 9. Offences by or relating to Public Servants. 10. Contempts of the lawful authority of Public Servants. 11. Offences against Public Justice. 12. Offences relating to Coin and Stamps. 13. Offences relating to Weights and Measures. 14. Offences affecting Public Health, Morals, &c. 15. Offences relating to Religion. 16. Offences affecting the Human Body. 17. Offences against Property. 18. Offences relating to Documents and Trade marks. 19. Criminal Breach of Contracts of Service. 20. Offences relating to Marriage. 21. Of Defamation. 22. Of Criminal Intimidation. 23. Of Attempts to commit Offences.

This classification varies somewhat from that of the original Macaulay Code, the Heads of which are 26 in number, and as follows:—1. General Explanations. 2. Of Punishments. 3. General Exceptions. 4. Abetment. 5. Of offences against the state. 6. Of offences relating to the Army and Navy. 7. Of offences against the public Tranquillity. 8. *Of the abuse of the powers of Public Servants.* 9. Of contempts of the Lawful authority of Public Servants. 10. Of offences against Public Justice. 11. *Of offences relating to the Revenue.* 12. Of offences relating to Coin. 13. Of offences relating to Weights and Measures. 14. Of offences affecting the Public Health, Safety and Convenience. 15. Of offences relating to Religion and Caste. 16. *Of Illegal Entrance into, and Residence in the Territories of the East India Company.* 17. *Of offences relating to the Press.* 18. Of offences affecting the Human Body. 19. Of offences against Property. 20. Of offences relating to Documents. 21. Of offences relating to Property-marks. 22. *Of the Illegal Pursuit of Legal Rights.* 23. Of the Criminal Breach of Contracts of Service. 24. Of offences relating to Marriage. 25. Of Defamation. 26. Of Criminal Intimidation, Insult and Annoyance.

Of these heads the 8th and 9th have in the present Code been incorporated and made into one, as also have the 20th and 21st; and four, namely, the 11th, the 16th, the 17th and the 22nd,

have been wholly omitted. To the division as it now stands we take no objection : it seems as good as any that can be made. The first five Chapters, and also the last, are as it were introductory or supplemental to the others, and must be taken as incorporated in them. The remaining seventeen define and describe the various offences in detail, and assign their punishments.

The general subdivisions of the Chapters are also good. Thus, in the chapter on offences affecting the Human Body, we have offences affecting Life,—causing Miscarriage,—Hurt,—Wrongful restraint,—Criminal force or assault,—Kidnapping,—Rape,—and Unnatural offences :—in the Chapter of offences against Property, Theft—Extortion—Robbery and Dacoity,—Criminal Breach of Trust,—Receiving stolen goods,—Cheating,—Fraudulent disposition of property,—Mischief,—and Criminal Trespass (which last head includes what are known to English law as House-breaking and Burglary.)

The Act commences by declaring that it shall be called "The Indian Penal Code." But it is in fact a mistake to give it any such name. The idea of a Code embraces more than will be found in this Act. In common parlance, a "code" is taken to mean a full and complete Collection of all the law upon a subject, so to speak *self contained*, and beyond which it is unnecessary to look for information. The "Indian Penal Code," however, does not profess to be a collection of such a nature. It does not profess to declare all the penalties to which the members of the community are liable, or to be complete without reference to other Acts. The revenue laws will still, for instance, have a separate existence ;—and the very first chapter of the "Code" refers to other enactments which are to remain in force and have a bearing upon it. It must not be supposed that the Code, although it is a collection and digest of by far the greater part of the penal law, is a collection and digest of the whole of it.

It is difficult to assign any very potent reason why this should be, and we should have been glad to have seen a measure brought forward which would have embraced the whole subject of penalties, and rendered it unnecessary to refer to any Act of the Legislature of earlier date. We are inclined to concur with the framers of the Macaulay Code in their endeavour to make their measure as comprehensive as possible. Piecemeal legislation is, however, the order of the day everywhere at present ; so probably we must make up our minds to submission on this point,—which, if necessary, we shall do with the more resignation, because there are reasons, though we do not consider them at all conclusive ones, for not giving the Code a wider scope than it has.

Under the new Code, many things will be very different from what they are now.

Its provisions will affect very materially, and in rather a novel manner, a no less important class of persons than the servants of the East India Company, amongst others:—

In the very first chapter, it is declared that every servant of the Company shall be liable to punishment, under the Code, for every act or omission contrary to its provision, of which he shall be guilty within the dominions of any Prince or State in alliance with the Company. This is an excellent law, and will operate as an increased check upon the excesses too often committed with impunity by travellers and others, when they go beyond the pale of the Company's jurisdiction. In such cases the local authorities are practically powerless, and the greater the facilities of punishing offenders on their return, the better.

Again, we find that under the Code, public officers will be criminally liable for acts not done by them in good faith, although done by them in execution of their duty, if the acts are such as would amount to offences if done by private persons. And the practical and sensible definition of the term *good faith*, which is given in the chapter of General Explanations, at once puts an end to the absurd notion so often put forward, that any thing done without a positively malicious intent is done in good faith, whoever may be the doer, or whatsoever the act done. This is the definition:—

45. Nothing is said to be done or believed in good faith, which is done or believed without due care and attention.

Bearing in mind therefore that nothing is done or believed in good faith, that is done or believed without due care and attention, let us consider the following clauses of the Fourth chapter:—

2. Nothing is an offence which is done by a Judge when acting judicially in the exercise of any power which is, or, which in good faith he believes to be, given to him by law.

6. Nothing which is done in pursuance of, or, which is warranted by the judgment or order of a Court of Justice, if done whilst such judgment or order remains in force, is an offence, notwithstanding the Court may have had no jurisdiction to pass such judgment or order, provided the person doing the act, in good faith, believes that the Court had such jurisdiction.

The effect of these provisions is, that Judicial officers of every grade, are made responsible to the Criminal Courts for acts done by them judicially, and as they believe in the exercise of powers vested in them by law, if they do not in fact possess such powers and have not used *due care and attention* in arriving at the belief which they have in their minds: and that no officer who executes a

warrant of a Court acting in excess of its jurisdiction, will be protected by his having merely acted as such officer and in obedience to his warrant, without any intention of doing harm, unless he, having used *due care and attention*, believed the Court had power to issue the warrant. It may perhaps be right, that superior officers should be made responsible as proposed, but it certainly is not right that the merely executive officers should be so. To subject them to such liability would render it necessary for them to sit in judgment upon those above them, and would justify them in refusing to move, because in their opinion the Court whose warrant they were called on to execute, had no power to issue it. It may be said that an officer of the lower class, who has executed a writ properly, has done his duty and acted in good faith. But it appears to us that the special words of clause 6, demand of him due care and attention on the particular matter of jurisdiction.

A case which actually occurred not long ago well illustrates how these clauses will operate. Under a special law, the judgments of the Calcutta Small Cause Court may be executed by the Zilla Judge of a district within which the defendant may be residing, *in the same manner as decrees of the Zilla Judge's own Court*. A obtained judgment against B in the Small Cause Court. A afterwards found B residing in the Mofussil, say some 300 miles from Calcutta. The place was rather out of the way, and the Court of the Zillah Judge was far off. In the neighbourhood, however, there was a Magistrate or Deputy Magistrate, and to his Court A had recourse. The Magistrate, who it will be observed, had no more right to meddle in the matter than we have, took upon himself to execute the judgment. He had the defendant arrested, and not content with that, started off the unfortunate wretch for Calcutta in charge of one of his Peons, whose orders were, to deliver up the body of the culprit at the Small Cause Court,—where he was in fact duly delivered up, after a journey of ever so many weeks !

Here the whole proceedings were grossly irregular. It would be impossible for the Magistrate to contend for a moment that he acted in the exercise of any power he had, or of any power which, after using *due care and attention*, he believed he had. Equally impossible would it be for the Peon to say, that if he had used due care and attention, or had ever inquired at all, he would have believed that the Court whose warrant he was executing had any jurisdiction in the matter. Both the public servants concerned would thus under the Code be criminally liable. It is perhaps not unreasonable that the Magistrate should be punishable criminally; for such carelessness is quit unpardonable. But the Peon ought not to be so. Persons of his class have never yet been

expected to look beyond the warrants they hold in their hands: the business of the Courts they serve never could be carried on, if they were.

The following clauses of the chapter on offences against Public Justice, we commend to the special notice of all judicial officers, whatever may be the particular nature of their duties:—

"27. Whoever, being a public servant, makes or pronounces in any stage of a judicial proceeding, any report, order, verdict, or decision, which he knows to be contrary to law, shall be punished with imprisonment of either description, for a term which may extend to seven years, or with fine, or with both.

"28. Whoever, being in any office which gives him legal authority to commit persons for trial or to confinement, or to keep persons in confinement, commits any person for trial or to confinement, or keeps any person in confinement in the exercise of that authority, knowing that in so doing he is acting contrary to law, shall be punished with imprisonment of either description, for a term which may extend to seven years, or with fine, or with both."

With every desire to see a reasonable amount of responsibility laid upon Public Officers, we cannot help thinking these provisions go a little too far. It is to be remarked, that in order to constitute an offence, it is not necessary that there should be on the part of the officer any malice, or any wish to injure any body,—the *mere knowledge* that he is acting contrary to strict law is of itself enough. The policy of such a rule as this, is very questionable: for it is absolutely necessary in this country for every public servant frequently to do small acts which he knows are contrary to law, but without doing which, he knows that he must fail in attaining objects which may be of the greatest public importance. Public Servants are sufficiently liable to the consequences of anything done by them improperly, without these clauses. They are not required for the protection of the subject, and tend rather to fetter too much the hands of those to whom the administration and execution of the law are entrusted. Of this we are well assured,—that if these clauses stand, and should a retrospective effect be given to them, there is not a single Judicial Officer, high or low, Covenanted or Uncovenanted, who might not be at once convicted and punished under them. It is a mistake to give too great facilities for making *criminal* charges against Public Servants: nothing should be considered as a *crime* in them, which does not shew grave moral blame. Proceedings taken in the Civil Courts, when those Courts do their duty, sufficiently punish offending public officers as a general rule, and injure their reputation quite enough. A criminal charge, even if it eventually fails, is sure to injure the reputation of the officer against whom it is made, in such a

degree as to injure his future usefulness. Heretofore it has been practically impossible in most cases, to make public officers answerable, even *civilly*, for the grossest abuse of their powers. Now it is proposed to run into the opposite extreme, and to render them punishable criminally, even for acts which they can scarcely help doing.

Lest Judges and Magistrates should think the Code too hard upon them, and to shew them that there is a kindly anxiety on the part of the Legislature to spare them as much trouble as possible, we must now refer to clause 18 of the Third chapter :—

"18. In all cases in which judgment is given that a person is guilty of one of several offences specified in the judgment, but that it is doubtful of which of these offences he is guilty, the offender shall be punished for the offence for which the lowest punishment is provided, if the same punishment is not provided for all"—

—than which, it is impossible to conceive a more delightful rule for a lazy man, as it contemplates and provides for the case of officers not choosing to be at the trouble to go fully into causes which come before them, but resting content merely with the conviction that the offender has done *something* wrong.

We have always believed that a man could not legally be punished, unless he has committed an offence, and that if he has committed an offence he must receive the punishment suitable to the offence committed, and no other. We have also been accustomed to consider a man to be entitled to go free, unless some distinct offence is proved against him : and that when certain facts are proved against a man, it is the business of the Courts to say whether those facts amount to an offence, and if any, to what offence.

But here we find a provision which has apparently been inserted, for the purpose of discharging Criminal Judges from the performance of one of the most important of all their duties ! If a man is charged with several offences, the Judge is not henceforth to be bound to say whether he is guilty or not guilty of all or any of them, and deal with him accordingly,—he may say he is guilty of some of them, *though of which he cannot tell*, and may give him the punishment which attaches to the least of the offences charged. Such a proposition is quite wrong. The very first principles of reasoning teach us, that before a man can be punished for having committed an offence, he must have committed that offence : if then, the Court can take upon itself to punish a man as having committed *an* offence, why should it not find as a fact that he has committed *that* offence ? If there is not evidence to warrant its taking the latter step, there cannot be evidence to warrant its punishing him.

There is already quite enough uncertainty and inefficiency in the findings and verdicts of the Courts, and we cannot afford to have more.

A somewhat similar provision is to be found in the Macaulay Code;* but its terms are less objectionable (though even of them we do not approve,) than are those of the clause as it is now formed: "In all cases in which judgment is given in the manner prescri- "bed in the law of procedure, that a person is guilty of an offence, "but that it is doubtful under which of certain penal provisions "of the Code he is punishable, &c." The Commissioners were aware of the novelty of the law they proposed to introduce, and accordingly, we find them in the notes submitted by them along with the Code to the Governor General in Council, explaining the reasons upon which they had acted, and the end they had in view. They write thus† "This provision is introdu- 'ced, to prevent an offender whose guilt is fully established, 'from eluding punishment, on the ground that the evidence 'does not enable the tribunals to pronounce with certainty under 'what penal provision his case falls.

"Where the doubt is merely between an aggravated and miti- 'gated form of the same offence, the difficulty will not be great. 'In such cases the offender ought always to be convicted of the 'minor offence. But the doubt may be between two offences, 'neither of which is a mitigated form of the other. The doubt, 'for example, may lie between murder and the aiding of murder. 'It may be certain, for example, that either A or B murdered 'Z, and that whichever was the murderer was aided by the other 'in the commission of the murder; but which committed the 'murder, and which aided the commission, it may be impossible 'to ascertain. To suffer both to go unpunished, though it is 'certain that both are guilty of capital crimes, merely because it 'is doubtful under what clause each of them is punishable, would 'be most unreasonable. It appears to us that a conviction in 'the alternative has this recommendation, that it is altogether 'free from fiction, that it is exactly consonant to the truth of 'the facts. If the Court find both A and B guilty of mur- 'der, or of aiding murder, the Court affirms that which is not 'literally true; and on all occasions, but especially in judicial 'proceedings, there is a strong presumption in favor of literal 'truth. If the Court finds that A has either murdered Z or 'aided B to murder Z, and that B has either murdered Z or 'aided A to murder Z, the Court finds that which is the lite- 'ral truth; nor will there, under the rule which we have laid

* Cl. 61.

† Note A, Penal Code, printed by order of the House of Commons, 3rd Aug. 1838, p. 79.

'down, be the smallest difficulty in prescribing the punish-
'ment.

"It is chiefly in cases where property has been fraudulently
'appropriated, that the necessity for such a provision as that
'which we are considering, will be felt. It will often be certain
'that there has been a fraudulent appropriation of property;
'and the only doubt will be, whether this fraudulent appropria-
'tion was a theft or a criminal breach of trust. To allow the
'offender to escape unpunished on account of such a doubt would
'be absurd. To subject him to the punishment of theft, which
'is the higher of the two crimes, between which the doubt lies,
'would be grossly unjust. The punishment to which he ought
'to be liable is evidently that of criminal breach of trust; but
'that a Court should convict an offender of a criminal breach of
'trust, when the opinion of the Court perhaps is, that it is an
'even chance, or more than an even chance, that no trust was
'ever reposed in him, seems to us an objectionable mode of pro-
'ceeding. We will not, in this stage of our labours, venture to
'lay it down as an unbending rule, that the tribunals ought never
'to employ phrases which, though literally false, are convention-
'ally true. Yet we are fully satisfied that the presumption is
'always strongly in favour of that form of expression which ac-
'curately sets forth the real state of the facts. In the case
'which we have supposed, the real state of the fact is, that the
'offender has certainly committed either theft or criminal breach
'of trust, and that the Court does not know which. This
'ought, therefore, in our opinion, to be the form of the judg-
'ment."

Where the only question is between an aggravated and a mitigated form of the same offence, no great harm can come of the proposed enactment: but when it extends beyond that question, it becomes in our opinion highly objectionable. It is much to be regretted that justice should ever be defeated merely for want of evidence, when no real doubt exists that an offence has been committed. Still the rights of individuals require that they should be convicted of some distinct offence before they are punished; that when once put upon their trial their case should be disposed of, one way or other: and that when they are punished for the offence which the Court finds proved, they should be acquitted as to those which are not proved. The Scotch verdict of "Not proven" might perhaps be introduced with advantage: it is we believe often found to be useful. But so long as no such verdict is known here, the old rule seems to be by far the most just and equitable one; namely, that every man is entitled either to be found guilty, or to be acquitted, of every charge made against him, and for which he is put upon his trial.

To the first clause of chapter IX. we take exception,—more because it requires some qualification, than on account of any thing wrong in the principle it contains. It treats of bribery among public servants, and declares every body to be liable to punishment, who "being, *or expecting to be*, a public servant," accepts or agrees to accept, for himself or for any other person, "any gratification whatever," as a motive "for doing, or forbearing to do, any official act." Now, this clause, so far as it applies to persons expecting to become public servants, should be at any rate so confined as to be applicable only to persons who *are* public servants, and who, while expecting to become so, accepted a gratification. The clause is altogether too wide, and will embrace all sorts of little arrangements, for mutual convenience, which are often made and very harmlessly so. Much discussion also might arise, as to the words "expecting to be" and their effect.

The subject of bribery and corruption in Public offices is, from the nature of it, one which requires to be dealt with in a comprehensive manner. That the Code deals with it comprehensively enough, will be seen from the following illustrations, which are annexed to clause 5 of chap. IX.:—

(b) "A, a Judge, buys of Z. who has a cause pending in A's Court, Government Promissory Notes at a discount, when they are selling in the market at a premium. A has obtained a valuable thing from Z without adequate consideration.

(c) "Z's brother is apprehended and taken before A, a magistrate, on a charge of perjury. A sells to Z shares in a bank at a premium, when they are selling in the market at a discount. Z pays A for the shares accordingly. The money so obtained by A, is a valuable thing obtained by him without adequate consideration."

— from which it appears that a man may be convicted of taking a bribe, although he never had the remotest intention of taking one, and did not know he had taken one, and is in fact the most honest and upright man in all India. It seems to us that these illustrations, in order to be good laws, should shew on the face of them, that both the Judge and the Magistrate knew they were buying below the market rates of the day.

Every possible provision seems to be made for preventing and punishing riots and affrays, and for putting an end to the present prevalent custom of making use of the services of latteals and such people. An "unlawful assembly" is * defined to be "an assembly of five or more persons, if the common object of the persons composing that assembly, is—

First. To overawe the Legislative or Executive Government of India, or the Government of any presidency, or any Lieutenant Go-

* Chapter VIII., Cl. 1.

vernor, or any Public Servant in the exercise of the lawful power of such Public Servant ; or

Second. To resist the execution of any law, or of any legal process ; or

Third. To commit any mischief or criminal trespass, or other offence ; or

Fourth. By means of force or shew of force to any person, to take or obtain possession of any property, or to deprive any person of the enjoyment of a right of way, or of the use of water or other in corporeal right of which he is in possession or enjoyment, or to enforce any right or supposed right ; or

Fifth. By means of force or resistance, or shew of force, to compel any person to do what he is not legally bound to do, or to omit to do what he is legally entitled to do.

And if force or violence is used by an unlawful assembly, it becomes a "riot." *

An "affray" is thus defined :—

18. When two or more persons, by quarrelling or fighting or otherwise conducting themselves in a tumultuous manner in a public place, disturb the public peace, they are said to "commit an affray."

It is declared that an assembly, not unlawful when assembled, may become so afterwards, and that the mere fact of being a member of an unlawful assembly renders a person liable to six months' imprisonment, and fine unlimited in amount. Joining unlawful assemblies armed with deadly weapons, and not dispersing when ordered to do so, are dealt with : and then we have a clause † which will have the effect of rendering every individual engaged in an unlawful assembly liable to be tried and punished for the crime of murder in the event of any one meeting with his death by violence from the hand of any member of the unlawful assembly, under such circumstances as to amount to murder in the individual whose act was the immediate cause of death.

The owners or occupiers of land on which a riot or unlawful assembly takes place are‡ liable to punishment if they do not at once give information to the police, and attempt to prevent the commission of any offence ; and those for whom the disturbance was got up, and those who receive any benefit from it, are offenders, unless they can prove that they did all they could, by giving information and otherwise, to stop the riot or assembly.

The concluding clauses of the chapter make it penal to be a latteal, or to entertain the services of a latteal, or of any body who will supply armed men when required.

* Chapter VIII., Cl. 6.

† Cl. 10.

‡ Cl. 14, 15.

Throughout this whole chapter of offences against the Public Tranquillity, matters are carried with a high and determined hand. And it is necessary that they should be so, for the number of unlawful assemblies, "riots" and "affrays" that are occurring constantly throughout the country, is very great. People in the Mofussil are often in a delicate and dangerous position, from the weakness of the arm of the law, the scarcity of Magistrates and Judges, and the corruption and cowardice of the Police in all its grades; and those who have recourse to riots and affrays have often much that is of weight to say in their defence. But for all that, it is impossible for any Government to recognise the right of looking after their own interests, after their own fashion, which is daily asserted by individuals. Public policy demands that such breaches of the peace should be put down, at whatever price, and it is right that they should be severely dealt with. If they are so dealt with, however, the duty of the Government to make proper arrangements for keeping the peace becomes more imperative than ever; and that such arrangements have yet been effectually made, no one will venture to assert.

The right of self-defence, and the circumstances under which it may be exercised, and the extent to which it may be carried, are fully defined in the last eleven clauses of the chapter of General Exceptions.

In many parts of the Code, it will be found that the malicious or fraudulent intent, which ought to be an ingredient in the act or omission, in order to constitute an offence, is wholly lost sight of. Thus in the chapter on offences relating to Coin, in clauses eleven and twelve, the mere delivery to any person of coin known by the giver to be counterfeit, is an offence punishable with imprisonment for three or five years, as the case may be, and with or without fine. So by clauses fourteen and fifteen, whoever *is in possession* of counterfeit coin, having known at the time he became possessed of it that it was counterfeit, is liable to punishment. There can be no question that these provisions are too stringent; the possession or delivery contemplated is no offence morally, and ought to be none according to law. Unless there is an intent to defraud,—an intent to utter and put off, is what is required by the English law,—the mere possession, or delivery should not be made a crime of. That these clauses, if allowed to remain, might work great hardship and injustice, will be seen from the following case. A, B and C are shopkeepers in the same neighbourhood, each having a separate shop. A receives from a customer three bad rupees, not knowing at the time he takes them, that they are counterfeit. B afterwards calls upon A, and thinking the rupees wonderfully good imitations, carries

off two of them, to keep with some bad money he has, which he has collected during the course of many years of trade. C being in B's shop in the course of the day, sees the pieces, and carries off one of them, to compare with some suspicious looking rupees he has himself just received. Having compared them he allows the counterfeit coins to remain lying in his chest. Here B commits the offence provided for by clauses 11 and 12, and C the offence under clauses 14 and 15, and yet neither the one nor the other of them intended to do any thing wrong, or did anything that could injure any body.

So in the provisions against wearing the dress of a soldier or public servant.*

"Whoever, not being a soldier in the Military or Naval service of the Queen, or of the East India Company, wears any garb or carries any token resembling any garb or token used by such a soldier, with the intention that it may be believed that he is such a soldier, shall be punished with imprisonment of either description for a term which may extend to three months, or fine which may extend to five hundred Rupees, or both.†

"Whoever, not belonging to a certain class of public servants, wears any garb or carries any token resembling any garb or token used by that class of public servants, with the intention that it may be believed, or with the knowledge that it is likely to be believed, that he belongs to that class of public servants, shall be punished with imprisonment of either description for a term which may extend to three months, or with fine which may extend to two hundred Rupees, or both."

These clauses seem to go unnecessarily far in making a crime of an act which may be done with the most perfectly harmless object, and without in fact doing any sort of harm. We have known an industrious bheestie go about for six months gaily clad in the cast-off garments of a soldier. If he, being of a humorous turn of mind, were once and away for a joke to pass himself off upon some of his water-carrying brethren as a soldier by reason of the dress he wore, he would according to the former of the two clauses be liable to three months' imprisonment and Rs. 500 fine! Such a law would of course be perfectly proper, if qualified by making *an improper intent* necessary in order to constitute the crime.

Another clause of chapter 7 is open to the same objection, though in a less degree.‡

"The Master or person in charge of a Merchant Vessel on Board

* Chapter VII., Clause 19.

† Chapter IX., Clause 12.

‡ Chapter IX., Clause 5.

of which any Deserter from the Army or Navy of the Queen, or of the East India Company, is concealed, shall, though ignorant of such concealment, be liable to a penalty not exceeding five hundred Rupees, if he might have known of such concealment, but for some neglect of his duty as such Master or person in charge, or but for some want of discipline on board of the vessel."

Ship captains must mind what they are about if this clause becomes law. It in fact makes them punishable for mere want of discipline in their ships, for it is just when there is a want of discipline, that such a concealment as is contemplated may take place, while the master is *bonâ fide* perfectly ignorant of it. The clause goes too far; but if the latter part of it was struck out, so as to restrict the master's liability to *neglect of duty*, it would be fair enough, and probably quite sufficient practically.

The improper omission of evil intent, is to be found again in the 14th clause of the chapter of offences against Public Justice. That clause renders any person liable to imprisonment for two years with or without fine, who destroys any document which he may be lawfully compelled to produce as evidence, *after he shall have been lawfully summoned or required to produce the same*, without saying anything as to the destruction in question being fraudulent or malicious, or its tending to cause, or having caused injury to any person. Now a man may be, and in this country often is, required to produce papers which have no bearing whatever on the case in which their production is demanded: without intending, or doing, anything to obstruct the course of justice, he may have good reasons for not producing these papers; and he may choose rather to destroy them than produce them. If he does destroy them, we do not see why what he does should be made a crime; it would be otherwise were the destruction proved to be wrongful or malicious. We say nothing of the accidental destruction of papers after notice to produce; such a thing might happen, and it ought not to be considered *criminal* if it is in reality accidental, and no harm came of it. It should not be forgotten that in India, although there is a great deal of concealing and keeping back of evidence, there is also a great deal of most unjust and oppressive annoyance given intentionally, by forcing people to attend the Courts and to produce papers, when in the end it turns out, that neither the individuals nor their papers, throw any light on the subject in dispute.

As the destruction of papers is made criminal, so is the *mere omission to produce** to a public servant, any document which one *is legally bound to produce*. And this brings us to the chapter on contempts of the lawful authority of public servants,—a con-

* Chapter X., Clause 5.

siderable part of which is founded on a wrong principle, and is very objectionable. The error is, that the ordinary powers and jurisdiction of the Courts are interfered with, and actual crimes and mere contempts (which have always hitherto been looked upon as distinct,) are mixed up together. The provisions in question, moreover, limit the powers of the Court in certain respects, to an undesirable degree. The power of indefinite imprisonment, for instance, which the Queen's Courts of Equity possess, is much more efficacious in compelling obedience than are these new enactments. It might be well worth while for a dishonest man to go to jail for six months, if he could so escape the production of a document which, if produced, would deprive him of a valuable property; but the prospect of unlimited incarceration would probably operate very differently on his productive powers. A system which leaves it to the Courts themselves to punish such offences as they see fit, no doubt requires efficient Courts to deal with it: but the legislature can hardly legislate on the footing of the inefficiency of the existing tribunals.

It is made a punishable offence to abscond in order to avoid service of summons, or other process,—to prevent service of summons or other process either on ourself or any body else,—or not to attend in obedience to the order of a public servant.*

It is almost needless to stop to shew how unjustly and oppressively these provisions may operate: we shall put but one case, and that, one which is by no means unlikely to occur.

A being in Calcutta, is sued by his kitmutgar for 10 Rs. The plaintiff chooses to subpœna A to attend and give evidence (which of course he has a right to do). A having other things to think of, does not attend, either to resist the claim, or to answer his subpœna, but allows judgment to go against him by default. Soon after this, he goes up-country, and at the first station he settles down in, he falls in with the kitmutgar. The latter (who has recovered all that he was entitled to under his judgment,) brings a criminal charge against A for not obeying the subpœna to appear and give evidence. A is liable to a year's imprisonment, or fine, or both. Some punishment he must receive, for under the circumstances of the case, it is clear that he intentionally omitted to attend in pursuance of the order of the Court.

These provisions require to be greatly modified: as they now stand, they would work only evil. Chapter X. however, contains a good many useful clauses as to omitting to give information, or giving false information to public officers, and as to making false statements on oath (not in strictly judicial proceedings,)

* Chapter X., Clause 1, 2, 4.

and as to obstructing, or not assisting, an officer in the execution of his duty, and the like matters.

There is an inconsistency, the reason for which is not very appreciable, in the punishments awarded by clauses 7 and 12. Under the former, whoever, being legally bound to furnish information to a public servant, furnishes information which he knows to be false, shall, if the information he is legally bound to give respects the commission of an offence, or is in order to the apprehension of an offender, be punishable with imprisonment for 2 years, with or without fine. By the latter, whoever gives false information to a public servant, intending to cause such public servant to use his power to the injury or annoyance of any person, shall be punishable with six month's imprisonment, with or without fine not exceeding 1000 Rupees. We do not see why the punishment assigned to the one offence should be so much less than that assigned to the other. The case contemplated in clause 12, is in fact comprehended in clause 7, but a more limited punishment is assigned to it. Probably the intention was to make the 7th clause refer to cases where an offence actually has been committed, and the other clause to cases where a false charge is brought, but no offence has in fact been committed at all. But if such was the intention, it is not very apparent. The two clauses moreover are not quite reconcileable with the following :—

"Chap. XI., Cl. 20. Whoever, with intent to cause injury to any person, institutes or causes to be instituted any criminal proceeding against that person, or falsely charges any person with having committed an offence, knowing that there is no just or lawful ground for such proceeding or charge against that person, shall, after the final determination of such proceeding or charge in that person's favour, be punished with imprisonment of either description for a term which may extend to two years, or with fine, or with both ; and if any criminal proceeding be instituted on a false charge of an offence punishable with death, transportation for life, or imprisonment for seven years or upwards, shall be punished with imprisonment of either description for a term which may extend to seven years, and shall also be liable to fine."

It is difficult to understand why, supposing the charge to be false, so much should be made to depend on its *final determination* in favor of the person charged.

The crimes of giving and fabricating false evidence, and of making false documents, are so well dealt with, that we hope there is at last a prospect of being able to reach those by whom these offences are usually committed, and who from the bad state of the law, have hitherto almost invariably been enabled to escape punishment.

The offences are thus defined :—

Chap. XI., Cl. 1. "Whoever in any stage of a judicial proceeding, being bound by an oath or by any express provision of law to state

the truth, or being bound by law to make a declaration upon any subject, states for truth that which he knows or believes to be false, or which he does not know or in good faith believe to be true, is said to give false evidence.

2. Whoever causes any circumstance to exist, or makes any false entry in any book or record, or makes any document containing a false statement, intending that such circumstance, false entry, or false statement may appear in evidence in a judicial proceeding, or in a proceeding taken by law before a public servant as such, or before a private arbitrator, and that such circumstance, so appearing in evidence, may cause any person who in such proceeding is to form an opinion upon the evidence, to entertain an erroneous opinion touching any point material to the result of such proceeding, is said "to fabricate false evidence."

And then we have the following explanations :*—

1. "A trial before a Court Martial is a judicial proceeding.

2. An investigation directed by law preliminary to a proceeding before a Court of Justice, is a stage of a judicial proceeding, though that investigation may not take place before a Court of Justice.

3. An investigation directed by a Court of Justice according to law, and conducted under the authority of a Court of Justice, is a stage of a judicial proceeding, though that investigation may not take place before a Court of Justice."

Using evidence known to be false—uttering or using a false certificate,—making or using a false declaration not on oath but receivable as evidence,—causing the disappearance of evidence, harbouring and screening offenders, or not apprehending them,—returning from transportation, and false persecution for the purposes of a suit, are amongst other matters, disposed of in the chapter of offences against public Justice. The 12th and 13th clauses relate to the omission to give information, and the giving false information, to the police: but they seem nearly limited repetitions of the 6th and 7th clauses of the preceding chapter, except that they assign a different punishment. Forgery, as defined in the Code, embraces a good deal that has not heretofore been comprised in the term. It is, for example, declared to be "forgery," to make "a person sign, seal, execute or alter a document, knowing that 'such person by reason of unsoundness of mind or intoxication 'cannot, or that by reason of deception practised upon him, he 'does not, know the contents of the document, or the nature of 'the alteration."†

Fraudulent dispositions of property, by direct or indirect means,‡ are made criminal offences in all engaged in them:

* Annexed to Cl. 3.

† Chapter, XVIII., Cl. 2, Para. 3.

‡ Chapter, XI., Cl. 16—19. Chapter XVII., Cl. 42—47.

and so we find* that any one is punishable with imprisonment for two years with or without fine, who *fraudulently claims any property or any interest therein, knowing that in good faith he has no right to the property or interest claimed.* In this land of fraudulent transfers of property, and false claims, these are very salutary and wholesome laws to lay down. But they are sufficiently sweeping, and if they could be carried out literally and to their full extent, we believe, that at least one-fourth of the whole male population of Bengal would be incarcerated under them, within six months after they came into force !

Perhaps the one point on which Englishmen consider they can well bear comparison with other nations, is their conduct in the matters treated of in the chapter of offences against Marriage. Any interference by the law with that conduct is accordingly looked upon with jealousy, except on the one subject of having, or attempting to have, a plurality of husbands or wives. On that there has long been legislation ; and custom, no less than the cruel injury entailed by that particular offence, have led us to think it criminal, and to approve of its being treated as such. Adultery is a very grave moral offence, and one which nobody can justify. Nevertheless we see no necessity for making a criminal offence of it. The *civil* consequences to the adulterer may be, and nearly always are, very serious; they are generally a very heavy punishment to him. It might be said, that as civil proceedings can be taken only by the injured husband, it is necessary to make the offence punishable criminally, so that the public may of itself be in a position to avenge the injury done to it, without the assistance, or reference to the wishes, of any private individual. But the explanation with which the chapter concludes, prevents the use of such an argument. It discloses that the real object of the new provisions is not the punishing the public wrong, but the indulgence of the vindictive feelings of the husband, for it provides that no proceedings for the punishment of adultery shall be instituted, except by the husband of the woman. Criminal laws are not enacted for the purposes of private revenge, or the gratification of the feelings of individuals; at least they ought not to be so, and if they are, can work no good.

The restricting the right to call the proposed enactment into operation, is an admission that there is no public need for the law. If it were really required, there would be no such restriction. Adultery is just one of those things in which the interference of the law, where not absolutely necessary, is to be deprecated. It ought to be left, as far as possible, to be dealt with by society. We have got on very well hitherto without any such provisions

* Chapter 17. Cl. 47.

as those now contemplated: why then make any alteration? A change was once attempted in England, at the time the republican party had the ascendant in 1650; but a speedy return to the old system was made at the restoration. As Sir William Blackstone says in his chapter on offences against God and Religion * (under which head he classes adultery), "it was not thought proper to renew a law of such unfashionable rigour."

Prevention is the real object of all punishment, but severe punishment will not prevent adultery. The French law is more severe than the English, and the Roman punishment was more severe than the French: yet the offence is more common in France than in England, and it was still more common in Rome. The fact is that the days are passed, if they ever existed, when the will of a legislator, or even of a legislative body, could make laws effective, which the moral sense and public opinion of the community do not demand. Such laws may be registered in the Statute book, but they do not become a rule of action. No provisions could have been more strict than those of the English law against duelling: but because the public mind did not feel that such a law was required, no one, however clearly he was in fact guilty, was ever convicted, if he appeared on the trial to have acted as a man of honor. The proposed clauses of the Code are not approved or demanded by public opinion, and we have no hesitation in saying they will be found practically useless.

In the Macaulay Code, adultery was *not* treated as a penal offence. We fully agree with the commissioners in their very sensible observations on the subject† :—

"* * * it seems to us that no advantage is to be expected from 'providing a punishment for adultery. The population seems to be 'divided into two classes—those whom neither the existing punishment, 'nor any punishment which we should feel ourselves justified in pro-'posing, will satisfy, and those who consider the injury produced by 'adultery as one for which a pecuniary compensation will sufficiently 'atone. Those whose feelings of honour are painfully affected by the 'infidelity of their wives, will not apply to the tribunals at all; those 'whose feelings are less delicate, will be satisfied by a payment of 'money. Under such circumstances, we think it best to treat adultery 'merely as a civil injury." * * *

"That some classes of the natives of India disapprove of the 'lenity with which adultery is now punished, we fully believe; but this, 'in our opinion, is a strong argument against punishing adultery at 'all. There are only two courses which, in our opinion, can pro-'perly be followed with respect to this and other great immoralities;

* Commentaries, Vol. 4, p. 65.

† *Note.*—Q. Penal Code: printed by order of the House of Commons, Aug. 3, 1838, p. 118.

'they ought to be punished very severely, or they ought not to be 'punished at all. The circumstance that they are left altogether un- 'punished does not prove that the legislature does not regard them 'with disapprobation; but when they are made punishable, the degree 'of severity of the punishment will always be considered as indicating 'the degree of disapprobation with which the legislature regards them. 'We have no doubt that the natives would be far less shocked by the 'total silence of the penal law touching adultery, than by seeing an 'adulterer sent to prison for a few months, while a coiner is im- 'prisoned for fourteen years."

But even if adultery is to be made a crime, still the present clauses are not what they ought to be. Clause 6 is as follows:—

"Whoever has sexual intercourse with the wife of another man, without the consent or connivance of that man, such sexual intercourse not amounting to the offence of rape, is guilty of the offence of adultery, and shall be punished with imprisonment of either description, for a term which may extend to five years, or with fine, or with both."

So that any man will be guilty of the crime of adultery, and punishable with imprisonment for five years and fine, who lives with a married woman whose husband has not obtained a divorce by Act of Parliament,—although there has been a separation, a divorce *a mensa et thoro*, and the proceedings towards the final divorce are all but complete. In such a case, this Clause would operate most injuriously. The offence having once been committed, it seems cruel (though there are opinions, we know, the other way,) to prevent the offenders from making the only reparation to society that is in their power, by marrying. An absurd mistake may be made in the construction of the 3rd and 4th clauses.

3. Whoever, having a husband or wife living, marries, in any case in which such marriage is void by reason of its taking place during the life of such husband or wife, shall be punished with imprisonment of either description for a term which may extend to seven years, and shall also be liable to fine.

Exception.—This clause does not extend to any person whose marriage with such husband or wife has been declared void by a court of competent jurisdiction, nor to any person who contracts a marriage during the life of a former husband or wife, if such husband or wife, at the time of the subsequent marriage, shall have been continually absent from such person for the space of seven years, and shall not have been heard of by such person as being alive within that time; provided the person contracting such subsequent marriage informs the person with whom such subsequent marriage is contracted, of the real state of facts, so far as the same are within his or her knowledge.

4. Whoever commits the offence defined in the last preceding clause, having concealed from the person with whom the subsequent

marriage is contracted, the fact of the former marriage shall be punished with imprisonment of either description for a term which may extend to ten years, and shall also be liable to fine."

On reading these for the first time the impression left upon our mind was, that one whose marriage had been declared void by a Court of competent jurisdiction, or whose husband or wife had been continually absent for seven years, might with safety marry again, *provided that the person contracting such subsequent marriage informed the person with whom such subsequent marriage was contracted, of the real state of facts, as far as the same were within his or her knowledge;*—but that the omission to comply with this proviso, and to give the required information, rendered the person liable to ten years' imprisonment. Such a state of things was too preposterous; and accordingly on further consideration we perceived that clause 4 applies not, as we had read it, to the immediately preceding "exception," but to clause 3 taken by itself. The wording of the Code here, when duly read and considered, and when the definition of the word "Clause" is referred to, is, we admit, not incorrect. Still there is in the arrangement a certain amount of confusion, which, as it is likely to lead to mistake, ought to be remedied.

If offences relating to marriage are to be made crimes of at all, we are at a loss to know on what principle it is, that they are dealt with as if the offence were entirely or almost entirely confined to the male sex. The only offence which it is proposed to make punishable in a woman is the *by deceit causing any man who is not lawfully married to her to believe that he is lawfully married to her, and to cohabit with her in consequence of that belief.* For that she is to be liable to imprisonment for one year, or fine, or both; while for the like offence, if it is committed by a man, the punishment extends to fourteen years' imprisonment *and* fine. It may be true that practically the offence is much less common among women than it is among men, and also that the results are less injurious to a man, when such a misfortune occurs to him, than they are to a woman. But these are not considerations sufficient to warrant a provision so purely arbitrary in favor of women, when the real guilt is in either case the same. These remarks apply to the whole of the proposed law of adultery. Under clause 6, a man may find himself imprisoned for five years with fine, but a woman cannot be touched. According to sound reasoning it seems to us, that what is good law for the one sex is good law for the other: and, on that principle, we find that the French law, which makes adultery a crime, makes it so, whatever may be the sex of the offender. As the indulgence of the husband's revengeful feelings is apparently the chief object of making the offence punishable criminally, it is rather surprising that the law has not been made

to embrace the offending wife. We should think that there would often be quite as much consolation found by the injured husband in locking his wife up for a time as in locking up her paramour. We have treated the subject only as it applies to Europeans, for we believe that it was for them principally that these provisions have been introduced. But we do not see that the proposed change is in any degree more required for the native population, than it is for the European, or more desired by them. On the contrary, if it were ever to be made use of by them, it would, we are convinced, be so merely for the purposes of revenge or extortion. It is true, that the offence was punishable criminally by Mahomedan law: but no injury seems to have been caused by that law having been allowed to fall in great part into desuetude: and we can nowhere discover any symptoms of a desire for its renewal. On the whole, we trust that, if this chapter is not omitted, it will be very much altered and modified.

We have at all times spoken our mind freely on all matters when we saw occasion, and we have spoken with perfect confidence and fearlessness, knowing that what we said was true, and that so long as it was true we were practically safe. *But it will no longer be safe to speak the truth.* We were not a little startled when we came to that portion of the Chapter on Defamation in which we found the following doctrine enunciated :—

1. Whoever by words either spoken or intended to be read, or by signs or by visible representations, makes or publishes any imputation concerning any person, intending to harm, or knowing or having reason to believe that such imputation will harm, the reputation of such person, is said, except in the cases excepted in the ten clauses next following, to defame that person.

2. *First exception.* It is not defamation to impute any thing which is true concerning any person, if it be for the public good that the imputation should be made or published. Whether or not it is for the public good is a question of fact.

Now we object wholly to any such law, and protest against being compelled at every moment to stop and consider whether or not it is likely that a Court of law will think that it is for the public good, that the truth of which we wish to deliver ourselves should be published. There is a great deal of truth spoken in this world, of which it is perfectly impossible at the time it is spoken, to say that its publication is for the public good, and the publication of which, nevertheless, eventually does a great deal of good. It may not always be particularly convenient to some people that the truth should be spoken; but on the whole, the more the truth is spoken the better. Here again we

find that the Macaulay Code has been altered for the worse. In it the question, which we admit is one of some little difficulty, is treated in a practical and sensible manner. "It is not defamation to 'attempt to cause any thing which is true to be believed in any 'quarter concerning any person."* We wish we had room for some extracts from the very able argument upon this provision, which is annexed by the Commissioners to their Code.†

The whole subject of defamation is, we think, dealt with in a manner not suitable to the state of society existing in this country. Some of the illustrations given in the Code shew how it will work :—

Cl. 1, *(a)* A says—"Z is an honest man; he never stole B's watch;" intending to cause it to be believed that Z did steal B's watch. This is defamation, unless it fall within one of the exceptions.

Cl. 7, *(d)* A says of a book published by Z. "Z's book is foolish, Z must be a weak man. Z's book is indecent, Z must be a man of impure mind." A is within this exception, if he says this in good faith, inasmuch as the opinion which he expresses of Z, respects Z's character only so far as it appears in Z's book, and no further.

(e) But if A says—"I am not surprised that Z's book is foolish and indecent, for he is a weak man, and a libertine,"—A is not within this exception, inasmuch as the opinion which he expresses of Z's character is an opinion not founded on Z's book.

Religious prejudices are protected and fostered to the utmost by the Code,—to such a degree indeed as to make it difficult to see how Missionary operations can go on at all. We would call the very serious attention of the Legislature to this. The object surely cannot be to throw impediments and dangers in the already sufficiently difficult path which Missionaries have to tread. The whole of the chapter of offences against Religion is very objectionable, and requires remodelling :—the two following clauses are perhaps the worst :—

15, Cl. 5. "Whoever, with the deliberate intention of wounding the religious feelings of any person, utters any word or makes any sound in the hearing of that person, or makes any gesture in the sight of that person, or places any object in the sight of that person, shall be punished with imprisonment of either description for a term which may extend to one year, or with fine, or with both.

2. "Whoever voluntarily causes disturbance to any assembly lawfully engaged in the performance of religious worship, or religious ceremonies, shall be punished with imprisonment of either description for a term which may extend to one year, or with fine, or with both."

* Clause 470, 1st Exceptions.

† Note R.

Too much provision is indeed made throughout the Code for the prejudices, feeling and fears of individuals.

Chap. 22, Cl. 4. "Whoever voluntarily causes or attempts to cause any person to do any thing which that person is not legally bound to do, or to omit to do anything which he is legally entitled to do, by inducing or attempting to induce that person to believe that he or any person in whom he is interested will become or will be rendered by some act of the offender an object of the divine displeasure if he does not do the thing which it is the object of the offender to cause him to do, or if he does the thing which it is the object of the offender to cause him to omit, shall be punished with imprisonment of either description for a term which may extend to one year, or with fine, or both.

Illustrations.

(a) A sits Dhurna at Z's door with the intention of causing it to be believed that by so sitting he renders Z an object of divine displeasure. A has committed the offence defined in this clause.

(b) A threatens Z that, unless Z performs a certain act, A will kill one of A's own children, under such circumstances that the killing would be believed to render Z an object of divine displeasure. A has committed the offence defined in this clause.

"Chap. 22, Cl. 5. Whoever intending to insult the modesty of any woman, utters any word, makes any sound or gesture, or exhibits any object, intending that such word or sound shall be heard, or that such gesture or object shall be seen by such woman, or intrudes upon the privacy of such woman, shall be punished with simple imprisonment for a term which may extend to one year, or with fine, or both.

"Chap. 10, Cl. 27. Whoever holds out any threat of injury to any person for the purpose of inducing that person to refrain or desist from making a legal application for protection against any injury, to any public servant legally empowered as such to give such protection, or to cause such protection to be given, shall be punished with imprisonment of either description for a term which may extend to one year, or with fine, or with both.

"Chap. 16, Cl. 54. Whoever makes any gesture, or any preparation, intending or knowing it to be likely that by such gesture or preparation he may cause any person present to apprehend that he who makes that gesture or preparation is about to use force to that other, and thereby to affect that other's sense of feeling by bringing any substance into contact with any part of that other's body, or any thing which that other is wearing, carrying, or using, is said to commit an assault.

Explanation. Mere words do not amount to an assault. But the words which a person uses may give to his gestures or preparations such a meaning as may make those gestures or preparations amount to an assault.

(b). A begins to unloose the muzzle of a ferocious dog, intending or knowing it to be likely that he may thereby cause Z to believe that he is about to cause the dog to attack Z. A has committed an assault upon Z.

"Chap. 16, Cl. 59. Whoever assaults or uses criminal force to any person, intending thereby to dishonor that person, otherwise than on grave and sudden provocation given by that person, shall be punished with imprisonment of either description for a term which may extend to two years, or with fine, or both.

With such provisions as these, it is well that we find at Clause 20 of Chapter 4 that:—

"Nothing is an offence by reason that it causes, or that it is intended to cause, or that it is known to be likely to cause, any harm, if that harm is so slight that no person of ordinary sense and temper would complain of such harm—

—which, we hope, will be borne in mind and used to check the countless frivolous charges which, if at all encouraged by the Courts, will be made under the Code.

The adulteration of articles of food and drink has of late years attracted much attention in England, and many attempts have been made to convert it into a penal offence. These attempts, however, have been in a great measure frustrated by those whose interest it was to support the existing state of things, and by those who considered themselves to be bound, at whatever cost, to uphold the time-honored but rather dishonest doctrine of *Caveat Emptor*. We have always thought that the Legislature ought to interfere, and that adulteration,—which is invariably done not only contrary to the wishes of those affected by it, but without their knowledge, and which is unquestionably highly blameworthy in a moral point of view,—ought to be made a penal offence. We are therefore disappointed to see the matter dealt with in so limited a manner in the 14th chapter. No provision is made for the case of adulteration, except when it is done to such an extent as to be "noxious," *and* with the intention of selling the article adulterated. If the adulteration is either not absolutely "noxious," or not done with the intention to sell the article, or knowledge that it probably will be sold, no offence has been committed. This is a mistake. Adulteration of any kind should be a punishable offence, if made either with the intent to sell the article adulterated, or without the knowledge and consent of the owner of it. As the clauses are now framed, there will be a constant difficulty in ascertaining whether the adulteration is "noxious," and in proving it to be so: and adulteration by one's own servants, who afterwards place the adulterated article on the table, will go unpunished. We see no good reason why we should not be enabled to punish our kitmutgars for giving us chalk and water instead of milk, or why the law against adulteration should not be of the most comprehensive nature. There is no hardship in making it so, for it would fall heavily on none but the dishonest,—and on

those too, whose dishonesty has shewn itself in such a shape as entirely to dispel all sympathy.

Under the head of criminal Trespass, we find the sub-divisions of, Criminal Trepass proper,—House Trespass,—Lurking House Trespass,—Lurking House Trespass by night,—House Breaking,—House Breaking by night. There is a tendency here to refine too much, and to draw too thin distinctions between offences. For instance, there is no use of making separate offences of Lurking House trespass and House Breaking. No doubt there *is* a difference between them; but so there is between getting into a House through a window, and other kinds of House Breaking, if it were worth while to draw a line between them. To all practical intents and purposes, Lurking House Trespass, and House Breaking, are the same offences. A very slight expansion of the definition of House Breaking, would include all that is now comprised in the two offences taken together: and it is highly desirable that such an expansion should be made, so as to reduce as much as possible the number of heads and classifications. The term "Lurking House Trespass" does not please our ear, and we should gladly hear no more of it. We regret the introduction of new names, and the unnecessary displacement of old ones. It will hardly be believed that there is no such thing as "felony" or "misdemeanour" under the Code, and that "burglary" and "perjury" are alike unknown to it.

The Code is not very simple in its form: and we have shewn above, how this defect led us into mistake. We fear, however, that it is too late now to expect much alteration in this respect. The chapters contain heads, clauses, explanations, exceptions, and illustrations—none of the three latter being included in the clauses to which they are attached, but the term "clause" being confined strictly to one of those portions of the chapter which are distinguished by prefixed numerical figures. The Code contains no direction as to the comparative weight and authority of its component parts, so that questions may be raised whether an explanation is of equal authority with a clause, an exception with an explanation, and so on.

As to the illustrations, in particular, some distinct declaration on this point is required, for at present it is impossible to say what their position is. It appears to us that if there are to be illustrations at all, they ought to have the authority of cases decided by a superior Court, whose decisions all other Courts are bound to follow; but that, further than that, they cannot be taken as in any degree extending or limiting the operation of the text. The framers of the original Macaulay Code seem to have intended the illustrations to have a wider effect, for we find them writing thus to the Governor General. "They will,

'we trust, greatly facilitate the understanding of law, and will, 'at the same time, often serve us as a defence of law. In our 'definitions we have repeatedly found ourselves under the ne- 'cessity of sacrificing neatness and perspicuity to precision, 'and of using harsh expressions, because we could find no other 'expressions which would convey our whole meaning, and no 'more than our whole meaning. Such definitions, standing 'by themselves, might repel and perplex the reader, and perhaps 'would be fully comprehended only by a few students after long 'application. * * * * We hope that when each 'of these definitions is followed by a collection of cases falling 'under it, and of cases which, though at first sight they appear 'to fall under it, do not really fall under it, the definition and 'the reasons which led to the adoption of it, will be readily 'understood." * * We confess we are at a loss to see how any good can come of the illustrations if they are placed higher than decisions of a superior Court, mere precedents which must be followed so far as they go. Many of them are rather superfluous: take for example the definition of the word "Coin," and the illustrations annexed to it.

Chap. 12. Cl. 1. Coin is metal used as money, stamped and issued by the authority of some Government, in order to be so used.

Coin stamped and issued by the authority of the Queen, is designated as the Queen's coin.

Illustrations.

(*a*) Cowries are not coin.

(*b*) Lumps of unstamped copper, though used as money, are not coin.

(*c*) An ancient Denarius is not now coin, inasmuch as such pieces are not now used as money.

(*d*) Medals are not coin, inasmuch as they are not intended to be used as money.

(*e*) Bank tokens issued by a private bank are not coin, inasmuch as they are not put forth by the authority of any Government.

These illustrations are certainly harmless enough. But of what conceivable use are they? Coin is said to be "metal," how then could a cowrie, possibly, be supposed to be "coin?" It is said to be "metal used as money *stamped*:" how then could *unstamped* metal be coin? These and many others of the illustrations do not in fact explain or clear up any thing as to which a reasonable doubt could exist. On the whole we think they are not of much assistance, and the Code would be better without them.

It is said with truth in the letter of the commissioners, that "in the definitions, neatness and perspicuity have sometimes 'been sacrificed to precision:" but for all that, it cannot be

denied that the very difficult task of explanation and definition has on the whole been well performed. In some instances however, there is a good deal of straining, if not of absolute deficiency. For example, we have the word "document" defined thus—

Chap. 2. Cl. 23. The word "document" denotes any matter expressed or described upon any substance by means of letters, figures, or marks, or by one or more of those means, intended to be used, or which may be used, as evidence of that matter.

Now a "document," as it seems to us, is not only the matter expressed or described, but also the thing expressing or describing the matter. It is not easy to conceive the existence of the matter expressed or described, apart from that which expresses or describes it, but both are in fact essential component parts, in the absence of either of which, there is no document. The illustrations which follow, are correct enough, for in all of them it is the *whole thing*,—the matter expressing and the matter expressed, taken together,—that is said to form the document.

A writing expressing the terms of a contract may be used as evidence of the contract. It is therefore a document.

A Check upon a Banker is a document.

A Power of Attorney is a document.

A Map or Plan is a document.

A writing containing directions or instructions is a document.

It is worthy of remark, that a tomb-stone and its inscription will henceforth constitute a document. The same fault that we complain of in the definition of the word "document" exists in that of the term—"valuable security," (Cl. 24) and is seen in the following illustration:—

A writes his name on the back of a bill of exchange. As the effect of this endorsement is to transfer the right to the bill to any person who may become the lawful holder of it, the endorsement is a "valuable security."

It is clear that the mere endorsement, if it is considered as abstracted from the bill of exchange upon which it is written, is simply a name and nothing more. It is not the endorsing a slip of blank paper that is a "valuable security;"—it is the endorsing a bill of exchange. The whole thing taken together makes a valuable security, the mere endorsement does not.

The following provisions seem to pay rather too much deference to the weaknesses of certain classes of the natives:—

Chap. 16, Cl. 2. *Exception* 5. Culpable homicide is not murder when the person whose death is caused, being above the age of eighteen years, suffers death, or takes the risk of death, with his own consent.

(c) A by instigation voluntarily causes Z, a person above eighteen

years of age, to put himself to death. A has abetted culpable homicide, but not murder.

69. Whoever kidnaps or abducts any person, in order that such person may be murdered, or may be so disposed of as to be put in danger of being murdered, shall be punished with transportation for life, or rigorous imprisonment for a term which may extend to fourteen years, and shall also be liable to fine.

And so also, in a different way, does Clause 71, which seems inserted expressly for the encouragement of laziness in the working classes :—

Chap. 16, Cl. 76. Whoever unlawfully compels any person to labor against the will of that person, shall be punished with imprisonment of either description for a term which may extend to one year, and shall also be liable to fine.

But we must conclude. We have drawn attention to some of the most marked features of the Code, and must leave it to our readers to search for themselves, for a great deal that is worthy of their attention, and unnoticed by us here. It has struck us forcibly on our perusal of it, that the Code has been composed more for the Europeans in India than for the natives : and that its operation as regards the former was kept in view, much more than its operation as regards the latter. This is a very grave mistake; but we trust confidently to see this, as well as many other of its defects, in a great degree remedied by the good sense of those through whose hands the Code will now have to pass before it becomes law. We are not surprised, however, that its anti-European tendency should create a good deal of distrust in the minds of Europeans, especially when it is considered that, almost simultaneously with the Code, a measure has been introduced, one object of which is to put an end to the right, which all British subjects throughout India have hitherto enjoyed, of being tried by the Queen's Courts, and a Jury of their peers.

In introducing the Criminal Procedure Bill, Mr. Peacock intimated that the effect of one of its provisions will be to bring all British subjects in India under the jurisdiction of the local Criminal Courts. This intimation is very distasteful to Europeans in the Mofussil. For our part we are well convinced, that the more British subjects know the full consequences which the proposed change will entail upon them, the more they will deprecate it.

The main arguments usually advanced in favor of the change, are, that the existing state of the law is anomalous, and that it makes the trial of British subjects expensive and difficult.

We must admit that the trial of British subjects is often an expensive and difficult business, and that possibly some members of that class, may in consequence have escaped punishment,

(although we believe that, in fact, this has seldom if ever been so.) But if we prove, as we shall do, that a reasonably good or fair trial is not to be had in the Company's Criminal Courts, —who shall say that the money and the trouble have been ill-expended, which were spent in insuring justice being done to the accused, or that the mere costliness or difficulty of the present system is of itself a sufficient reason for its abolition?

But the present state of things is said to be anomalous. Possibly it may be so: still it does not by any means follow as a matter of course, that it is therefore an evil. If there be a good reason for the existence of an exception or anomaly, it ought not to be put an end to, merely because it is an exception or anomaly. Many things that are perfect in theory are very bad in practice. Uniformity is good in theory, and is a very good thing if it can be had: so are fraternity, and equality, although they are found to be in reality perfectly impracticable.

What the promoters of the proposed change have to prove, is, that on the whole it will do more good than harm: and this they have not yet proved. The change, if carried out, will benefit no one, while in the Mofussil Courts, British subjects will not meet with that justice which they now find in the Courts to which they are subject. It must be borne in mind that the question now raised, is not whether higher privileges shall be extended to British subjects than to the natives, but whether British subjects are to be deprived of privileges they have long enjoyed. We need not stop to eulogise the Supreme Courts. They have plenty of imperfections no doubt,—but no one will contradict us when we say, that in the exercise of their criminal jurisdiction, they have on the whole given satisfaction to the community, native as well as European, and have done good and substantial justice in the cases that have been dealt with by them. With the Criminal Courts of the Company it is far otherwise. We by no means wish to underrate the difficulties with which the Company's officers have to contend; nor to forget the amount of work they have to get through, and the circumstances under which they have to do it; but the fact remains, that throughout the land the administration of justice by the Company's Courts is as bad and inefficient as it can be. It must of necessity be so, under a system, the foundation of which is, that every officer is to be taken as knowing every thing and able to do every thing, whatever may have been his opportunities, and whatever his real qualifications may be.

No Courts can be said to be working well, so long as their proceedings are all uncertainty, and the business of every Court seems to be to act independently of, and differently from, all others. Yet that is the position of the existing Courts. Sessions Judges and Magistrates do one day, that of which they do exactly

the opposite on the next day: while the Sudder upsets as much as it possibly can of what is done by the Courts below, and is as inconsistent in its own decisions as they are,—and often quite as far from being right. The following facts will scarcely be believed. They are collected from the reports of its own proceedings published monthly by the Court of Nizamut Adawlut itself:—

In the year 1855, the Sudder Court spared the lives of 34 persons, whom the Lower Courts had convicted, and sentenced (or rather presented for sentence, for in such cases the sentence is not final, but made as a recommendation) *to death*. Fourteen of the 34 were *fully acquitted:* one was imprisoned for seven years, nineteen were transported for life.

The Sudder *sentenced to death* eleven prisoners whom the Lower Courts had thought worthy of a less punishment. The Sudder *acquitted* 22 persons sentenced by the Lower Courts to transportation for life: and reduced the punishment of ten others who had received the like sentence. Altogether in the course of the year, the Sudder *acquitted and released some* 377 *persons who had been convicted and sentenced by the Courts below!*

And it is the same always. For instance in the reports for the month of January 1856, we find that four persons sentenced (or recommended) by the Lower Court to transportation, one for fourteen years, the rest for life,—were *by the Sudder Court sentenced to death:* and seven whom the Lower Court thought worthy of *death* had their lives spared, one of them being *wholly acquitted* by the Sudder. Eighteen sentenced to transportation for life were *acquitted* by the Sudder: four had their term changed to fourteen years, two to seven years, and one had all the proceedings quashed.

Seven persons sentenced to transportation or imprisonment for fourteen years were *acquitted.*

Three whom the Lower Court had sentenced to imprisonment for ten years, were by the Sudder transported for life, and one had the whole proceedings in his case quashed.

Seven persons sentenced to imprisonment for seven years were *acquitted,* and one had his term reduced to two years.

Seven persons sentenced to imprisonment for five years were *acquitted,* and one had his term reduced to two years.

Four sentenced to four years' imprisonment were *acquitted* by the Sudder, as were six who had been sentenced to three years, one sentenced to one year, and ten sentenced to six months.

A lamentable account truly, of one month's proceedings of the highest criminal Courts in the country!

And so in the month of February, two persons sentenced to *death* were *acquitted* by the Sudder: and four had their sentences changed to transportation or imprisonment,—one of them for only three years. *Four sentenced by the Lower Court to transpor-*

tation for life were by the Sudder condemned to death, and *ten others were acquitted:*—and then follows a long list, as similar as possible to that of the preceding month.

What can be worse than this? Fourteen innocent men sentenced to death in the course of 1855,—and one in the month of January of last year, and two in the month of February!! And besides these, who shall say how many more of those who underwent capital punishment during these periods, were innocent? With the facts before us which we have just stated, we confess that their not having succeeded in obtaining their release, conveys to our mind no conviction of their having been really guilty. That they may have been so, is all that can be said. Of all the solemn and responsible acts that a man can be called upon to perform, there is none in any degree approaching in solemn importance to the taking away the lives of his fellow-creatures, yet with what culpable levity and negligence is this duty performed here?

It matters not, so far as the public are concerned, who is to blame for this state of things,—whether it is the fault of the Sudder, or of the Lower Court, or, as is most probable, of both equally. Whatever be the cause, the facts speak for themselves: and their effects may be imagined more easily than described.

Lest we may be supposed to be exaggerating or misrepresenting the real state of the criminal administration of the country, (our remarks of course apply more especially to Bengal) we refer to the minute written by Mr. Halliday on the subject, in the spring of last year, where every thing we have said is, we believe, more than confirmed. We shall not be considered to have gone too far in the observations we have made, when it is found to be the opinion of the present Lieutenant Governor of Bengal, that it will be vain to improve the agency for the detection and apprehension of criminals, unless the agency for trying them is also improved:—that the criminal tribunals certainly do not command the confidence of the people:—that the general native opinion is certainly, that the administration of criminal justice is but little better than a lottery, in which, however, the best chances are with the criminal, which is also very much the opinion of the European Mofussil community;—and that until the tribunals are reformed, there is no use in reforming the police,—and that it would be money thrown away to attempt the latter till the former was vigorously insisted upon.

Is it to be wondered at, that British subjects should object to being brought under the jurisdiction of such Courts, and that they value highly their privilege of being tried in the same manner as Englishmen at home or in the colonies, and with the same chance of being well tried as they have? It would be very wonderful if they did not. And this is no time for the Government to attempt so dangerous an experiment.

If it should be considered necessary to make some alteration, (which we do not at all see that it is), the only mode in which it can with any propriety be done, is to subject Europeans, only to the oldest and most experienced class of the Mofussil judges, and to try them before these judges, assisted by a jury, composed of British subjects.

The jury must be of British subjects: for it is only in Calcutta that a sufficient number of any other class can be found, in whom any thing like independence or impartiality, or the intelligence required, exists. And a jury of British subjects might always be had by making available for the purpose the services of military officers, and all others not actually employed themselves as judges or magistrates. With a real jury of British subjects, (whose verdict as to the facts would be final) and with only persons of the standing of zillah judges to try them, we do not see that much injustice would often be done. The tendency of the proposed change is wholly backwards: it will merely lower the standard of average efficiency in the Courts throughout India, which is already low enough. For it will transfer an extensive jurisdiction from Courts that now exercise it satisfactorily, to Courts which are not qualified to exercise it with the same result. It degrades British subjects to the position of natives, without benefiting the latter in any degree.

A movement such as that now suggested is purely retrograde, and is no reform. The real mode to effect a reform is not to diminish the privileges of British subjects, but to increase those of natives. Give them as good Courts as the others have. Improve the Courts and the administration of Criminal Justice in the Mofussil, till they become reasonably good and trustworthy, and then make all persons subject to them alike. It is not that British subjects wish to be under the control of no Courts at all: they want nothing more than the assurance of having a fair trial. Let any reasonable provision for their safety be made, and we venture to say that they will be the last to complain of all persons being alike made subject to the jurisdiction of the local Courts.

The proposed change must not be made, so long as the Courts of the Mofussil deal with matters of life and death no better than they do now. It will not do for the lower Courts to sentence Englishmen to death, and for the superior Court immediately to acquit them; still less will it do for the superior Court to condemn to death Englishmen whom the inferior Courts consider not legally to have forfeited their lives. Yet these things are done daily by the Courts in dealing with natives.

ART. IV.—1. *The Three Colonies of Australia.* By S. SIDNEY, Esq. London, 1852.

2. *Two years in Australia.* By WILLIAM HOWITT. London, 1856.

3. *Papers relative to the discovery of gold in Australia, presented to both Houses of Parliament.* By H. M. COMMAND. 1855-56.

4. *The Argus.* Melbourne, 1851-56.

5. *The Empire.* Sydney, 1851-56.

6. *The South Australian.* Adelaide, 1851-56.

7. *Household Words.* 1853-55.

AT the period when Great Britain had gone far towards laying the foundation of a powerful Empire in the East on the ruins of Hindoo and Mussulman thrones, when some of her greatest Generals had earned their laurels on Indian battlefields, when East Indian Commerce had become a valuable item in the mercantile balance sheet of England,—in the early part of the last quarter of the eighteenth century, Australia did not contain a single British inhabitant; it had no other than a Geographical existence, and that but of an uncertain extent and nature. Quiros, Torres, Tasman, Dampier and Cook had each contributed his share of discovery of the "*Great South Land,*" without, however, demonstrating any of its advantages to the mother country. Regarded in the West as a vast Island-continent without value, as a barren desert of sand and rock, without rivers or soil, it was not until the exigencies of the state required some outlet for the yearly increasing tenants of its jails and hulks, that attention was turned to the eastern shores of the Australian continent, where Botany Bay, since made terrible in the annals of criminal depravity, was selected as the most fitting portion of New South Wales, on which to plant the dregs of the convict population of Great Britain, the felon-pioneers of a new and wealthy dependency of the Crown.

It was early in the year 1788, whilst Tippoo, the Lion of Mysore, was being hunted to his den by the British forces, that the first convict cargo was landed, not in Botany Bay as originally intended, but eighteen miles further northwards, in Port Jackson, on the capacious shores of which Sydney has since risen, through much vice and tribulation, to a proud pre-eminence amongst the colonial cities of Great Britain. In both countries, in the East as in the South, how great the progress, how strange the result; the end how unlike to the beginning! In the one commerce

led the way, in the other felonry: in the one the pioneers were a handful of factors and supercargoes, giving place before long to conquerors, to statesmen, to the arbiters of the destiny of a hundred millions of subjects;—in the other, the jailor and the convict toiled on through years of unknown horrors, amidst the sound of the lash, and the clank of the chain, subduing the desert and the savage, by slow degrees, to the influence of civilization, (such as it was in those days, in that *terra incognita*,) and falling back in time to make way for the shepherd, the farmer, the trader and the gold digger, who amongst them have made "the rose 'to blossom in the wilderness" of that strange South Land. In the East our empire has been won by the bayonet and the sword; in the South it has been gained by the shepherd's crook and the plough. But in both, there are the same tendencies, the like final results; a strong attachment to the old country, whilst its government deals out justice to all portions of its dependencies; a noble field for the spare energy, intelligence and philanthropy of the father-land; and between one and the other of them a growing intercourse, which though as yet but in its merest infancy, will before many years shall have elapsed, ripen into mature greatness, and render Australia not less important and valuable to India, than will be the latter to the Colonies of the South.

Without going the length of maintaining that without transportation Australia could never have become what it is, we are certainly justified in stating, that the convict systems of New South Wales and Van Dieman's Land, infamous as they were in early days, and bad though they may have been amidst a later free population, were the real pioneers of the after prosperity of those Colonies; and that much that has been done towards the improvement of their inland communication, the erection of public works, docks and similar undertakings, could not have been attempted without an abundant supply of convict labor.

We have no intention, however, of writing a treatise upon transportation and its effects, neither do we desire to plunge our readers into the details of the early Australian settlements, carrying them from the history of the first bale of wool and cask of tallow shipped thence to Europe, to the latest returns from the newly discovered Gold Field in Van Dieman's Land. We wish only to convey to them a just idea of the capabilities and probable future position and requirements of the Australian Colonies, with a view to demonstrating the relationship which must, at no distant date, spring out of their several interests and those of British India.

It is not altogether without interest to remark, that in 1788, the first year of the Colony of New South Wales, when the British in India ruled upwards of fifty millions of subjects, and

passed through their hands goods inwards and outwards to a vast amount, the English in Australia numbered one thousand and thirty souls, the greater portion of whom were convicts; whilst their live stock, destined to figure imposingly in the history of Australian commerce, consisted of two Bulls, five Cows, one Horse, three Mares, three Colts, twenty-nine Sheep, nineteen Goats, besides Pigs, Rabbits, and Poultry in proportion! Amongst the earlier documents connected with this settlement, we find it recorded as a public calamity, that the two bulls, and four out of the five cows landed, had been allowed to wander away from their grazing ground by their convict keeper who had them in charge, and were lost in the woods. This accident, which was at the time regarded as a real misfortune, proved eventually a most fortunate incident, and one which went far to hasten the agricultural prosperity of New South Wales.* Seven years later, when the growing colony, badly off for supplies of fresh meat, was dependent on the salt rations drawn from the government stores, it was rumoured that wild cattle were to be found grazing at no great distance from the settlement. "The reports of the natives led the Governor to send out as scouts, men employed as hunters, to collect fresh provisions for public use, and they discovered feeding on rich pastures on the other side of the River Nepean, still known as Cow Pastures, a herd of sixty cattle, the produce of the five cows and two bulls lost in 1788."

To realize this sight, so pleasant to the eyes of men condemned to perpetual rations of salt meat, rarely varied by fresh pork, the Governor himself set out on an expedition, and tracked and viewed the herd with great delight. An old bull fiercely and obstinately charging, was slaughtered in self-defence; he proved to be of the humpy-shouldered Cape breed of the lost stock, which left no doubt of the identity of the herd, and dispelled the notion of indigenous cattle; the party made a delicious meal, and a few pounds were carried back thirty-eight miles, over a rough road, to Paramatta, the rest being left to the native dogs and hawks, with deep regret, "as meat, fresh or salt, had long been a rarity with the poor sick in the hospital." Many an Australian within the last ten years, galloping through Cow Pastures to purchase the finest cattle at £2 a head, to boil down for tallow, has been reminded of the time when a bit of bull beef, that a well-bred dog would now reject, was a luxury to a Governor and his suite!

These wild cattle were preserved, and increased greatly, dividing into "mobs," each under the charge of a victorious bull, until the general increase of stock diminished their value: many were consumed by surrounding small settlers, and the rest being fierce and

* Sidney's Colonies of Australia, chap. iv. p. 36.

a nuisance, were destroyed by order of the Government, when beef ceased to be a luxury.

About the time these wild herds were discovered, three miserable cows of the Indian breed sold for £189; and two years afterwards, two colonial ships were employed eight months in bringing 51 cows, 3 bulls, and 90 sheep from the Cape, at a cost exceeding the highest price ever paid for the finest short-horns.

The attention of the local authorities was early directed to the subject of stock-rearing and agriculture, and several Governors of New South Wales held out inducements to the better disposed portion of the convict community to give their care to these pursuits. Between the years 1790 and 1800, there appear to have settled in the colony about one hundred free persons, who received grants of land from the Government, to the extent of four thousand acres, mostly close to the young town of Sydney, and of poor quality: these "free soilers" were, however, nearly all ignorant of, and unfitted for, agricultural pursuits, and although provided with tools, seeds, rations and huts at the public expense, made but sorry progress, and failed for many years to carry out the wishes of the Government in rendering the settlement somewhat less dependent than it had been, upon supplies of food from Europe.

Early in the present century John MacArthur, late a Lieutenant in the New South Wales Corps, turned his attention to the rearing of cattle, with more care and industry than had hitherto been the case with the cultivators of those days. He had observed the great improvement produced by the climate of New South Wales in the fleeces of the hairy sheep of India, and was not long in appreciating the value of the district called the "Cow Pastures," on which the long lost herd of cattle had been found feeding. "In 1803, in consequence of grievances of which he had to complain at the hands of the colonial authorities, MacArthur visited England, and there not only obtained permission to purchase a few pure Spanish Merinos from the flock of George III., at a time when the exportation of the Merino from Spain was a capital crime, and the breed was only to be procured by royal favor, but produced such an effect on the privy council, before whom he was examined on his Wool projects, that he carried out to the colony on his return, an order for a grant of ten thousand acres. This grant he selected on the banks of the Cow Pasture River, for he appreciated the discrimination of the lost herd, which had there fattened and increased, while the colonists starved. This spot has since become famous as "Camden" where the first pure Merinos were bred, and the first vineyards planted in New South Wales."*

* Sidney's Colonies of Australia, p. 62.

MacArthur may in truth be styled the father of New South Wales industry: it was his example which turned the attention of Australian settlers to something beyond the production of mutton and beef for the shambles of Sydney, and which in due time made the capital of that promising Colony what we now find it.

Extending from Cape Howe in the South to 26° South Latitude, and westerly from the sea coast to the 141st degree of East Longitude, the Colony of New South Wales comprises upwards of three hundred millions of acres, of which one thirtieth part, or ten millions of acres, had in 1854 been sold by the Crown, whilst of the remainder one-half had been occupied as sheep walks, with or without license. The outside farmers, or "*Squatters*" as they are colonially termed, have however located themselves far beyond the actual limits of the Colony, paying little regard to the Geographical distribution of the settlement, and having in mind only the suitability of the land for their flocks and herds. Wherever a fine tract of pasture, well watered and healthily situated, presented itself to the eye of the nomadic stockman, there would he pitch his tent and feed his herds, whilst a blade of grass remained. Along the larger portion of its nine hundred miles of sea-board, New South Wales can boast of millions of acres of pasture land unequalled in the world, except by that of the sister colonies of Victoria and Van Dieman's Land. Stretching away from the coast to the base, and even far up the slopes, of the many mountain ranges which rear their lofty peaks from the Australian Alps in the south, to the Blue Mountains in the north, we find a continuous run of undulating country, watered by many rivers, and dotted at intervals with the magnificent forests which furnish the Australians with endless supplies of the finest timber for carpentering or shipbuilding. In many of these sea-board districts the land is very lightly timbered, so lightly indeed, that when the plough is put into it the trees are left standing, and the furrows are simply carried along between them, their shade not being sufficient to cause any injury to the crops.

Not the least valuable of Australian products are its forests. Many of the trees are of huge growth, without a branch from the trunk for fifty or sixty feet. In the north however, the forests contain a very different race from those of the south, partaking more of a tropical character. There, the palms are found in greater variety and of finer growth, whilst the ground below them will often be densely covered with a low thorny brushwood, interspersed with tree-ferns and monster creeping plants, rendering any passage through them quite impossible. Scattered amongst these clustering jungles, are many large tracts

of meadow land of finest quality, dotted over with the picturesque Australian apple-tree.

The Blue Mountains, rising at their greatest elevation to six thousand feet, and running nearly north and south, form a barrier between the prairie land of the sea-board and the vast cattle pastures of the interior, known as the Liverpool Plains, the Darling Downs, and the Bathurst Plains, rich in grasses and gold. Great though the rush to the Gold Fields of Ophir and the Turon has been, it has not in any way injured the farming prospects of the Colony; on the contrary, cattle rearing and corn growing were never more profitably followed than they have been during the past few years in New South Wales. Blest with a delightfully temperate climate, free from any local diseases of consequence, and devoid of wild beasts or reptiles, the farmer emigrant finds in either of the Australian colonies an admirable field for his enterprise.

There would appear to be something in the pasture and climate of this vast island-continent peculiarly suitable to the growth of wool, since in no part do we hear of the least want of success, though nearly all the sheep farmers of Australia were originally persons following occupations quite opposed to such a life. Sidney, in his book on the Australian Colonies, assures us that:—

"A thriving farm-house will possess as elegant furniture, and as prettily-laid-out garden, as any villa in an English county, with large orchards and vineyards, yielding far more than can be consumed on the spot. A dairy, pig-stye, stabling, and poultry-yard, all impart to the Australian farm, a home-like air of rural prosperity not to be mistaken. It is by no means a rare occurrence for a young man, commencing with a capital of a thousand pounds, to make it ten times that amount in less than the same number of years; but such can only be accomplished by habits of industry and perseverance."

We have all read in the journals of the day, how barristers, clerks, University men, sons of noblemen, half-pay officers, &c. &c. to say nothing of sailors, pot-boys and shopmen, have taken to the Bush, and kindly too, turning out first-rate shepherds and stockmen, and eventually becoming well-to-do farmers themselves. In Australia, a man, to make his way, must be prepared to turn his hand to anything: thus says Sidney:—

"The labourers employed on a sheep-farm or "run" are expected and obliged to make themselves generally useful with most tools; the shepherd becomes a carpenter and joiner; the drayman adds to his occupation that of wheelwright, blacksmith, and farrier; whilst the farmer himself generally contrives to handle every kind of tool that is needed on the establishment. Each sheep-walk, in fact, becomes a little world within itself, independent of all external help, save from

the nearest town, to which it looks at certain periods for supplies of European or country-made goods or implements. Some of these farms are hundreds of miles from a town, in which case a journey for supplies is but seldom made, the principal articles being brought up on the return of the drays from carrying the wool to market or for shipment to England."

In Australia, the colonist feels none of the depressing effects of a tropical climate, as is the case in India; for although there are days when the thermometer will range as high in Sydney as in Calcutta or Bombay, they are but exceptions to the rule. The Anglo-Saxon is enabled to put forth his energies to the utmost in the Southern Colonies, and the very circumstance detailed above, of men being compelled to turn their hands to any and every occupation, is precisely one of the principal causes of the astonishing changes worked in the face of that country, by a comparative handful of men. In Australia there are no native customs standing boldly yet sluggishly in the way of improvement; there are no Hindoo prejudices to hurl back the tide of civilization from the west. The European finds an open field, a broad blank, on the face of which he is free to write a wonderful history of Colonisation.

Whilst the Metropolis of British India, and the other capital cities of our Eastern Empire, have all but stood still, and scarcely made a step towards adapting themselves to the advancing circumstances of the times, we have within the few past years, heard how two young Colonies have risen in the South to become important dependencies of the British Crown, whilst Sydney, Melbourne, and Adelaide, to say nothing of a dozen lesser towns, have grown to giant proportions, enjoying municipal institutions, and the colonies themselves have been endowed with electoral privileges, of a character as ample as the prairies forming the green boundaries of those young kingdoms.

From mere wool-growing countries, the Australian colonies have become large producers of many other articles, whilst breweries, soap-factories, sugar-refineries, saw-mills, ship-building yards, and other important establishments, are to be found in their towns. The discovery of gold in the great exhibition year of 1851, within the Bathurst district of New South Wales, has undoubtedly exercised a vast influence on the progress of that and the adjacent settlements. In the first instance, the rush to the Gold Fields alarmed the sheep and cattle farmers, who found themselves left without the labor necessary for securing their crops and tending their herds and flocks. For a time, great and universal was the panic amongst the landed gentry, and at the moment there appeared every probability of a cattle crisis, as ruinous as that of 1841-2, when sheep sold for two shillings a head, and cows for a crown each. It pro-

mised, indeed, to be "much cry and little wool" in good earnest. Fortunately, however, the evil worked out its own remedy: so great was the "Exodus" from all parts, but especially from the mother country, of clerks, shop-keepers, gentlemen out at elbows, &c., who quickly found that "life at the Diggings" was not quite suitable to their tastes or accomplishments, that the vacated posts of shepherds and stockmen became rapidly filled up by volunteers, who would otherwise have starved; as did, alas, but too many in those days.

All our Colonies and dependencies have had their seasons of trial and adversity, though not always from similar causes. Calcutta had its own time of trouble, when the five great houses succumbed to the pressure of the day; and later still, when Joint Stockery ran riot with the substance of the widow and the orphan. Ceylon bowed its head nine years ago before the madness of coffee planting. Our friends in the South Land have suffered quite as severely, though without the bitterness of rascality to deepen their misery. In New South Wales it was purely a commercial crisis; in South Australia it was the Land gambling arising out of the silly "Wakefield system" which for a time paralysed that colony: in Victoria it was the Gold Fever which more recently wrought so much tribulation.

It is within the memory of many of us when a voyage to New South Wales was considered a desperate undertaking, almost equal to plunging into the sandy bosom of the Great Sahara. Much later it required a period of twelve months to receive a reply to a letter written from England to Australia. None but vessels of blemished character were then sent to those colonies: anything, however unseaworthy, was considered good enough for the Antipodes. Now, all this is changed, and probably the finest ships in the world for sailing qualities, equalling even the once famous opium clippers of the East, are employed in the Australian passenger trade.

It is but twenty years since the first settler placed his foot on the rich grassy shores of Port Philip, now known as Victoria. It seems but a short time since we read the first account of that newly settled district as a pastoral country, and for which it is indeed admirably adapted, from its rich pastures and open undulating face. It appears but as yesterday when we watched the first ship depart from England for South Australia, with the germ of a model colony packed up on board, even to a small wooden church, with the pews and cushions complete. Since that time however, huge fortunes have been made in both those colonies by copper, gold and wool. The ancient India with its fabled wealth, grows poor and insignificant by the side of modern Australia. Are not the vaunted mines of Golconda

a miserable failure, after the endless outpourings of the Burra-Burra mines, near Adelaide, which in one season yielded twelve hundred per cent. profit to the proprietary? Had Aladdin's garden more hidden treasures within its bosom than the quartz diggings of Mount Alexander, of Deadman's Gully or of Breakneck Flat?

Incredible as it may appear, it is nevertheless a fact, that in the year eighteen hundred and fifty-three the handful of Australians, scattered over that fifth quarter of the globe, took from the mother country as much of her goods (within a few thousands,) as did the whole of British India, viz. to the value of seven millions sterling, being in the proportion of twenty-eight pounds sterling per head in Australia, and one shilling in India!

Surely the Gold Diggers of the South must be a thirsty race, for we find that in the above named year they took one-half of the total exports of Wine and Beer from Great Britain;—in other words, they absorbed two hundred thousand barrels of strong beer, and nearly one million and a half gallons of wine, all of which it must be remembered was exclusive of spirits, which were taken at the rate of *seven gallons for each colonist!*

These figures, it must be remembered, relate to colonies, by far the larger portion of which were not twenty years old. They have reference chiefly to a settlement whose population had doubled itself in three years, in the port of which there might have been seen at one period not fewer than two hundred trading vessels: where Railroads, Electric Telegraphs, Docks, Wharves, &c., had sprung up with a rapidity that might well make the Calcutta public blush, and where the self-elected legislature had, at one sitting, voted the modest sum of three millions sterling for the year's expenditure of the Melbourne municipality!

The present prosperity of the Gold Colonies, great as it is, has not been achieved without a heavy probation. Homelessness, starvation, misery and beggary have been the trials awaiting the scores of thousands who, for two years after the discovery, literally flooded that land with a mighty human tide. The Backwoodsmen of Canada, the Indigo Planters of Bengal, the Coffee growers of Ceylon, cannot talk much about "roughing it" after the scenes enacted by "fair ladies" and "dainty gentlemen" in the Land of the South.

Here is the Picture of a first night in Melbourne*:—"The 'room was a large one for Melbourne, and as it lay about a foot 'and a half lower than the street, the whole surface was literally 'flooded by the day's rain. This was the lodgers' bed-room. It 'was full of stretchers, some thirty of them—with blankets, or

* Household Words. Vol. VIII., p. 9.

'rugs, or other rough covering by way of bed-clothes. Nearly 'all were occupied, and the men for the most part sound asleep, 'though it was barely nine o'clock. Many of the beds held two 'huddled together, and here and there a complicated bundle with 'feet sticking out, looked like three. In one corner a gruff con-'versation on the subject of gold scales and weights was going on 'in an under tone; several lay smoking; others gave an occa-'sional roll and grunt in a drunken sleep, or muttered incoherent 'imprecations. Scarcely any of them had their clothes off, but 'I noticed two exceptions—one of a man who had evidently taken 'off everything but his boots (which clung no doubt from the wet,) 'and a beaver skin cap tied under his chin; the other displayed 'a pair of immense legs from beneath his dirty blanket, decked 'in a pair of scarlet stockings with yellow clocks, a recent purchase 'perhaps from some clown at the circus at an exorbitant price. 'Blue shirts and crimson shirts were also visible at intervals, and 'one shirt seemed to be of some drab colour, with great Orleans 'plums all over it. A large gold watch with a gaudy chain, was 'hung upon a nail near one of the sleepers' heads, and a massive 'gold chain and seals were dangling over the edge of a quart pot '(the watch being safe and softly lodging in the beer dregs 'inside) standing on the window ledge. There could not have 'been less than five and forty or fifty people here.

"The room was lighted by one bad candle, stuck in the neck 'of a beer bottle, placed on a flour-cask near the opposite wall. 'Its flickering reflection in the dark waters beneath contributed 'an additional gleam to the comfortable scene around.

"I was standing at this time on a sort of raised step, or thresh-'old formed of loose bricks above the level of the floor, or rather 'lagoon of the bed-room, considering how I should attain my 'stretcher. I felt that it would not do to step from stretcher to 'stretcher, because if I escaped treading upon a limb of any of 'the sleepers, I might still upset the thing with all upon it clean 'over; so I deliberately walked through. From the inequalities 'of the ground, the depth varied from six to twelve or fourteen 'inches. I mounted my ricketty couch—drew off my boots, at the 'imminent risk of upsetting the concern with my struggles in a 'seated position, and enveloped myself in the blanket, trusting 'that my wet clothes would produce a warm steam, on the water-'cure principle; before the realization of which, being very tired 'indeed, I fell asleep."

Of the misery following in the train of the great Gold Dis-coveries of Australia much has been written; much more might be told. How many bankrupteies took place in 1854; how many were reduced to beggary, has become matter of history. But so great have been the productive resources of the Vic-

toria Gold Fields that this prostration did not long continue. The elasticity of the precious commodity now forming the staple of the Australian Colonies, enabled them to throw off the temporary evil with a vigor which left scarcely a trace behind, and at the present moment, there is, perhaps, no part of the British dominions where commerce is upon a more wholesome footing.

By the latest returns from the Diggings of Victoria, it would appear that their population amounted to nearly a quarter of a million. Towns had sprung up about their vicinity. Their stores were amply supplied with necessaries and luxuries from all parts of the world. The roads were good. The police was well organised. Order was maintained, and trade was brisk and sound, whilst the yields of the auriferous tracts remained in the aggregate as liberal as of yore.

South Australia, the prosperity of which was at one time seriously jeopardised by the rush of its population to Mount Alexander and the neighbouring "Diggings," has long since resumed its former prosperous position, and bids fair to maintain it. The wondrous, almost fabulous, copper mines of the Burra-Burra have gone far to give this colony its present standing, which it has attained, despite the severe trials inflicted on it by imperial statesmen, and theorising political economists.

In all these Colonies, not even excepting Van Dieman's Land, where gold has also been lately discovered, the source of commercial prosperity is to be found, not more in the precious metal, than in the yield of their swarming flocks. The wool of Australia has worked a change in the trade of the European continent scarcely less important than that caused by its gold. Instead of England looking to Germany and Spain for supplies of fine fleeces, the merchants of those countries attend the quarterly sales of Australian wools in London to make their purchases, whilst the quantity of this article annually imported from those colonies into Great Britain, amounts to not less than seventy millions of pounds weight; more than was ever produced by the continental growers of wool in any one year.

Rich as are the lands of Australia, generous as is the climate of the great South Land, it will be long before the colonists can hope to produce a sufficiency of food for all their wants. New Zealand contributes a fair share of vegetable supplies. Java contributes its quota. The western seaboard of Southern America furnishes not a little of the cereal requirements of the colonies; whilst from the United States, and the mother country, vast are the shipments of food to the same quarter. It is to British India however, that Australia should look for liberal and uninterrupted supplies of many of the articles of produce she most requires. Nearer than either the States or England, India can furnish wheat, rice, sugar,

&c., at prices with which scarcely any other country can compete. The coarse but useful gunny bagging of Bengal would appear to be precisely the article adapted to colonial purposes of carriage from the sea ports to the far interior; nor indeed do we see anything whatever to prevent the gunny cloth weavers of India furnishing wool-sacks for Australia of sufficient quality for their trade, and infinitely cheaper than those at present supplied by the Dundee manufacturers. Already the Sydney and Melbourne communities have their factories, their mills and their refineries, but Australian labor is, and will be for a long time, far too expensive an article to enable them to produce all they require as cheaply as they can purchase elsewhere.

Already the trade between Calcutta and the Ports of Australia has assumed an important character. We have seen as many as seven vessels at one time in the Hooghly, loading with cargoes for Australia, commanding a steady and remunerating rate of freight; and at no period of the year are we without traders plying between the city of Palaces and the Gold colonies. It is so far against the immediate and rapid extension of this southern trade, that the Australians have nothing to give us in return, of which we can avail ourselves, except a few cargoes of horses, not always to be spared by them, and some copper. Of their wool and tallow we do not stand in any need, whilst the one precious product of their soil is as a drug in our market. If our merchants take any portion of their gold, it is but for transmission to Europe, where it must be exchanged for silver, to be brought out at some risk and cost, to assume the office in our currency which the more valuable metal may not now perform.

There are many amongst us who can remember the agitation caused in politico-economical circles in England, during the first years of the great gold discoveries in Australia, as to the probable effects of the sudden influx of the metal upon prices and exchanges. A revolution in the commercial world was predicted, which should shake trade to its foundation; and many were the plans devised for obviating the much dreaded evil. We have seen but a few years roll over us since these gloomy predictions were made, yet we have outlived them all, and witnessed not only a steady absorption of the precious metal throughout Europe and America, but a great decrease in the stock of gold in the Bank of England.

If, as we have recently seen, a gold coinage is preferred for public convenience, in densely peopled countries, where communication from one part to another is at once easy and rapid, surely we are justified in believing that in a vast country such as India, with the means of transport limited, and with trading communities separated from each other by long and costly journeys, a

similar addition to our currency, an adjunct rather than a displacement of our silver coinage, could not fail to prove of great commercial utility. With the growing feeling in favor of a decimal coinage in all parts of the world, public opinion points to the sovereign and half sovereign as admirably suited to the requirements of the day in this country. Whilst greatly aiding the growth of commercial enterprise in India, the adoption of a partial gold coinage, made a legal tender at all Collectorates and Government Banks, would tend to foster the infant trade between the Presidencies and the Southern Colonies.

Native prejudice, so often made a bugbear in the way of social improvement, must not be brought to bear against the partial adoption of the use of gold. It might indeed be otherwise, were silver attempted to be de-nationalised, but not in the case we are supposing. Native prejudice is, we suspect, more frequently imaginary than real, and is doubtless frequently employed as a stalking horse by timid men, of whom there has ever been a plentiful crop in India. We should perhaps be nearer the mark were we to speak of European rather than native prejudice in this and many other matters. We venture to predict that, so soon as a recognised gold coinage shall be issued for the Indian presidencies, there will be abundant employment for it;—native merchants will be amongst the first to take advantage of the new coin. It was urged as an argument against the adoption of railways in India, that natives could never be induced to travel by any such novel means of locomotion; that time was of no moment to them; that they would not pay the railway charges; with many other reasons equally opposed to their adoption of steam travelling. The working of but a fractional portion of the East Indian line in a very few months afforded a decisive and practical refutation of these confident assertions. It has been the same with the Electric Telegraph.

In like manner shall we live to see the native community of India availing themselves of a more suitable coinage, whenever our lethargic government can be induced to make the necessary effort. There is not, indeed, the shadow of a reason for not trying that which we believe can scarcely be termed an experiment. Even did it not succeed to the fullest extent anticipated, were its advantages appreciated only by the European community, there would still be sufficient apology for the trial; and those officials who fear or doubt the result, do but help to strengthen the impression rapidly gaining ground, of the necessity for some infusion of new blood into our administrative departments. Those who will attempt nothing can achieve nothing, and are without value.

The re-establishment of steam communication between this country and the Southern colonies must be hailed with satisfaction

as one sure means of advantage to both. No trade can be long maintained between any two communities without a fixed and easy mode of correspondence. The post office is the right hand of trade. Paralyse the one and you maim the other. As the one becomes active, so does the other increase in vigor. Australia, in gaining steam communication with India, becomes united with Singapore, China and other parts of the East, with all of which she cannot fail to have intercourse in trade.

To India there will be yet another advantage gained by the establishment of a mail steam packet line hence to Australia; inasmuch as it will afford a sure and ready means to invalids of obtaining change of air, in a country nearer, and with a climate more congenial, than that of England. Nearer as to time than the Cape, a visit to Adelaide or Melbourne would often render a longer and more costly journey to Europe unnecessary.

Regarding the Colonies of Australia from whatever point of view we may, we cannot fail to perceive how much of mutual interest is bound up in their position and that of India. We cannot indeed separate the interest of any portion of the British Dependencies from that of others: they form but parts of a great imperial whole, equally demanding the fostering care of the parent state; no advantage accorded to one should be denied to another, if compatible with local and imperial interests.

British India has before it a brilliant future, that may eclipse the glories of Tamerlane or Akbar; Australia can point to no past; it has posterity alone to think of. Its bye-gone history is written on the sands of its mighty deserts, by the naked feet of the savage and the kangaroo. Its present tells surely what may yet spring from it. A great and prosperous branch of the Anglo-Saxon family shall, in the far regions of the South, work out the destiny which in the East and West, their brethren are so well accomplishing. The Sun, which never sets on the British rule, shall witness no falling off from their sure and onward course.

ART. V.—1. *Commercial Products of the Vegetable Kingdom.* By J. F. SIMMONDS. London, 1855.

2. *Coffee Planting in Ceylon; Past and Present.* Colombo, 1855.

3. *Cheap Coffee and Cheap Government. A Letter to Earl Grey, H. M. Principal Secretary of State for the Colonies.* By ISAAC TOMKINS OF PASBAGE. Ceylon, 1848.

4. *The Journal of the Indian Archipelago. Culture of Coffee in Java.*

5. *State Papers.* By various GOVERNORS OF NETHERLANDS India, 1750-80.

THE Legislative Act by which the British Parliament decreed the abolition of slavery in the Colonial possessions of England, led to more important results than were anticipated by the principal agents in that great struggle for human freedom. The British West Indies, once the source of so many noble fortunes, and the chief supplier of England's wants in most articles of Tropical produce, have almost ceased to attract attention from the commercial world. First Indigo, then Cotton, ceased to be articles of produce from those once fertile islands. In more recent days we have seen Sugar and Coffee disappear from many of those colonies, becoming commercial myths in their history,—whilst their ports are unvisited, their fields neglected, their local Governments frequently bankrupt, and the descendants of the princely West India Proprietors may not unfrequently be found dwellers in some rustic union, or some suburban alms-house. Even the "West India Docks" are diverted from their once busy purpose. They no longer contain fleets of Sugar and Coffee laden vessels. Their rusty cranes, their grass-grown pavements, their desolate ware-houses, tell the same tale of shattered fortunes, of ruined trade, and are visited by straggling craft from all the odd corners of the world, certain of finding a welcome within the mouldy precincts of that waste of brick and water.

Revolutions such as these are ever instructive, and should serve as beacons to those political-economy pilots who may attempt hereafter to steer the bark of the state into unknown ports. It is our *present* purpose, however, to treat only of the article Coffee; pointing out the course of events which led to its extended culture eastward of the Cape of Good Hope, glancing at the success it has hitherto encountered, and examining the grounds which exist for looking to British India as a field for the profitable cultivation of the berry. Of Sugar we may possibly have something to say in a future number: the subject is not less sugges-

tive, and perhaps even more important, as affecting British industry and British capital.

Coffee, originally an article of Eastern growth alone, became a product of considerable importance and value to England in her West India Islands, where, and in Java, the bulk of the then Coffee produce of the world was raised. The Dutch, at all times anxious to encourage agricultural and commercial progress in their Colonial possessions, though not always adopting the most enlightened mode of effecting the object, shewed not a little anxiety to foster, by every means in their power, the growth of this favorite berry. Whilst the cultivation of cinnamon, cloves, and nutmegs was especially, and by law, confined to particular islands, under the most severe penalties, coffee was permitted to be grown throughout all the Dutch possessions in the East. A Dutchman who should have dared to grow a single nutmeg plant out of the prescribed limits of the Eastern Archipelago, or to produce cinnamon elsewhere than in Ceylon, would assuredly have been hung, drawn and quartered, as a terror and warning to all rash speculators in those parts. On the other hand the Dutch Governors of Ceylon had, from their earliest possession of that fertile island, endeavoured to foster the production of coffee amongst the Singhalese villagers, by offering to take the berry from them at certain fixed rates, in payment of tithes and taxes.

We learn from a Memoir left by Governor Schreuder in 1762 for the guidance of his successor, how long and unceasing had been the efforts of the local authorities in this direction. "Coffee," says this State Paper, "is a cultivation to which the natives had 'been with great difficulty induced to attend—and unfortunately 'when at last, in 1739, we had brought matters so far as to 'obtain from this island 10,000 lbs., the supply from Java and 'the West Indies became so large that our prices here could not 'be maintained, and we were forced insensibly to let this article 'of produce slide from us—or at least not to urge it on the 'natives in any manner whatever—in fact we reduced our cost 'prices from 5 to 2 stuivers, which was scarcely a rate to give 'compensation for the trouble of growing Coffee. The disturbances at Java, however, have had a bad effect on their cultivation, and we have been ordered again to encourage the growth 'here, and to receive all that is offered us for purchase: this 'state of things should be kept up, at least we should never 'have in store less than what is sufficient for one shipment."

In spite of the constant endeavours to promote this cultivation, the Dutch Governors do not appear to have met with much success: for on the capture of Colombo by the British at the end of the last century, the total produce of the island amounted

to not more than a few thousand bags. In a paper drawn up by an ex-official of the local Dutch Government, for the information of Sir Alexander Johnstone, we learn that the coffee of Ceylon was considered superior to that of Java or Bourbon, and approached more nearly to that of Mocha, whence the first plants were brought. It was matter of complaint that the Singhalese did not attend to its culture, but contented themselves with picking up the fruit as it fell from the trees in their wild state, which consequently produced but half the quantity of those in other places. The same "Memoir" states that Ceylon did not yield more than 25,000 pounds weight of coffee, though it was deemed capable of producing ten times that quantity under the supervision of experienced hands. We have lived to see it export in one year 500,000 cwts.

The prosperity following on the heels of peace, which acted as a spur on most branches of trade at home, was felt equally in the increasing consumption of such articles as sugar, tea and coffee. The abolition of slavery in the West India Islands brought about a complete revolution in the industry of those colonies. The impression, so strong in England, that the Negro would work with greater alacrity when free than when in bondage, was doomed to end in disappointment. The emancipated slaves ceased to become laborers on the estates, preferring the idleness and ease of a squatting life to the steady toil of a hired servant; and thus the production rapidly declined in those islands of the west, which had once supplied England with all she needed.

Between the years 1830 and 1835, the coffee produce of the West India Colonies had fallen below the annual consumption of Great Britain, and in the latter year it was actually seven millions of pounds short of the quantity required. Necessity then compelled the Home Legislature to do an act of bare justice to British India, by consenting, in self-defence, to admit coffee, the produce of British territories in the east, at a rate of import duty similar to that levied on the article from the West Indies, viz., six pence a pound, in place of nine pence, which it had previously been subject to, and which foreign coffee still had to pay on importation into Great Britain.

The capabilities of Ceylon as a coffee producing country attracted the attention of the then Governor, Sir Edward Barnes, who was soon followed in his experiments by a few enterprising civilians and merchants. In 1837 several plantations were formed, which in a year or two gave indisputable signs of success. Prices rose at home, in consequence of consumption oustripping production, and when in 1842 an additional penny protection in the import duty was accorded British Colonial coffee over foreign, Ceylon rose rapidly into importance.

The rush to the jungles of Ceylon at that time was, on a reduced scale, what the rush to the Diggings was in 1851. The following list of Crown Lands sold for the purpose of coffee planting at that period will bear witness to the eagerness with which capitalists and speculators entered this new field of Colonial industry :—

In	1837	the Government sold	3,661 Acres.
„	1838	.....	10,401 „
„	1839	.....	9,570 „
„	1840	.....	42,841 „
„	1841	.....	78,685 „
„	1842	.....	48,533 „
„	1843	.....	58,336 „
„	1844	.....	20,415 „
„	1845	.....	19,062 „

Isaac Tomkins (the *nom-de-plume* of a Ceylon merchant and planter) tells us how, when he landed in the island in 1841, all was *couleur de rose*, or rather *couleur de cafe*, with the berry selling at home for ninety shillings a hundred weight, and Crown forest land eagerly bought at £5 an acre.

The coffee mania of that day, so freely shared in subsequently by Bengal civilians and professional men, is thus described by *Isaac* :—

"He was a miserable man who could not talk of his land. From the then Governor down to the native cutchery clerk, all could lay their fingers on the map of *Ceylon*, and say 'there, just between those mountains' or near the bend of that river 'lies my coffee estate!' A new comer might have called to pay his respects to the head of the Government, and before he had been five minutes with His Excellency, the topic would have turned to Coffee and the land in Ambegamoa.

"You might have looked in at the Treasury, and you would have found the Honorable the Treasurer of Ceylon trying to rub the silver skin off a few berries of the maiden crop from his estate in the Ambegamoa district.

"Had you called on the Auditor General, you might have seen him deep in the intricate mysteries of—not the Colonial accounts, but—the check roll of coolies on the 'Pea-berry estate.'

"Had you looked in at the Commissariat, long would have been he consultation as to the Bandy hire of rice to the Parke-ville estate near Kandy. Peep in at the Colombo Post Office at about 4 P. M.; the Kandy mail is just in, and the letters are sorting. See how anxiously the Post Master dives amongst the motley heap. At last he has it—the weekly report from his Superintendent.

"At the office too of the Commissioner of Roads, you would have found that functionary busily occupied on one rash undertaking, the great Ambegamoa Road that was to pass close by his own estate, and those of his brother civilians, at a cost of £40,000. In a basket under his desk, covered with official dust, are heaps of estimates and letters touching lines through other districts, all endorsed 'for future consideration.'"*

The disasters of the years 1847 and 1848 are still fresh in the recollection of our readers. Ceylon planters felt the shock, and for a time were unable to stand the effects of low prices and ruined credit. Isaac Tomkins draws a sad picture of the condition of many in that island. "I would," he writes in bitterness of spirit, "that some of the Manchester politicians could see a few estates about here: the bungalows with their broken doors and windows; the once neatly trimmed rose-hedges smothered, like the former hopes of the proprietor, with rank weeds: the paths over-grown with grass: the little flower garden that the wife was once so fond of, trampled down by buffaloes: the jessamine arbor, in which the planter had so often sat playing with his children, half torn down, half hidden by jungle, the resort of wild animals. And where is the planter-proprietor and his family? He is getting jungle-fever and £5 a month on an unhealthy but paying estate: his wife and family live, or rather exist, on the charity of friends, for fortunately, My Lord, we *have* some friends *out here*—there are no Manchester manufacturers in Ceylon."†

It was indeed a hard struggle for the island planters. Several of the leading mercantile firms suspended payment: and on nearly all estates cultivation was quite lost sight of:—

"Disaster followed disaster; mortgages were entered up every where; the local journals teemed with advertisements of fiscal sales, and auctions of bankrupt estates; no description of property was exempt from the depreciation in value which ensued. Estates changed hands for a few hundreds, on which thousands had been lavished. Few were thought to have bargains who received back estates at the amount of their respective mortgages, and it was very few estates indeed that did not leave the hands of their original owners before the end of 1849. In Colombo house property fell in value, and many of the Portuguese and Dutch descendants, who had imprudently built and mortgaged, and mortgaged and built, were greatly impoverished. Importers of goods suffered severe losses by the numerous failures of native dealers, and by the large quantities of miscellaneous goods, which they were compelled to sacrifice at auction in order to dispose of. In the mean time the value of produce had fallen in the London

* "Cheap Coffee and Cheap Government," page 7.

† Ibid, page 5.

market below its legitimate value. And both for native and plantation coffee the depreciated return on the annual crop could not be less than half a million."*

But when things are at their worst, they must soon mend, and so it was with the Ceylon planters :—

"The end of 1849 and the beginning of 1850 began to indicate greater confidence in commercial feeling. Imports revived, prices for produce improved, and a more healthy system on plantations had produced results which materially assisted to commence the removal of the general distrust in coffee planting; though it must be observed that there were some whose estimate of coffee planting from the commencement had undergone no change. They had ever insisted upon economy, though the usages around them had opposed their practice, they had perceived the impending ruin, as the necessary consequence of a system pursued in defiance of all business principles, and were quite prepared to hail the general improvement, whenever circumstances should drive the majority into an acknowledgment of a proper system."†

During the coffee panic a few men of experience, having both capital and confidence, became the purchasers of estates at almost nominal figures. Plantations in full bearing—though overgrown with low jungle, were sold for less than the original cost of the land, many of them too with extensive works upon them erected at a heavy outlay. Two estates in Badulla, of 350 acres of three-years-old coffee, and which had cost £10,000, were sold for £350. Another plantation in the Dolosbagie district of 100 acres was sold for £105; having cost the proprietor £4,000. The Hindogalla estate had cost £15,000, but in 1849 realised only £500. Whilst the Moorootie estate sold for £700 after an expenditure of £9,000. These two latter, however, could scarcely have been worth the sums they realised, the selection of the locality having been bad, and the soil wretched in the extreme. In most cases the first crops covered the cost of these purchases, the home market rallying after the extraordinary depression of 1848, and in the course of two seasons affording prices which, with the economy forced on the planters, enabled them to work through their difficulties, and eventually place themselves in a most excellent position.

Short crops, the result of neglected cultivation on so many properties, helped in no small degree to bring about a more healthy state of the European markets. The following statement shews the gradual but marked effect, first of want of cultivation, and afterwards of care and skill in the management of the Ceylon estates.

* Coffee Planting in Ceylon, page 21.

† Ibid, page 23.

Coffee shipped from Ceylon during the following seasons :—

		Cwts.
1848-49	Plantation Coffee	210,633
	Native ditto	121,215
		331,848
1849-50	Plantation Coffee	230,866
	Native ditto	99,071
		329,937
1850-51	Plantation Coffee	197,636
	Native ditto	90,274
		287,910
1851-52	Plantation Coffee	155,386
	Native ditto	152,621
		308,007
1852-53	Plantation Coffee	208,658
	Native ditto	115,451
		324,109

From this period the production of this island has continued to progress steadily, until in last year, the crop amounted to cwts. 500,000, the chief increase being in the yield of plantation crops, arising partly from the formation of new estates, but principally the effect of skilful cultivation and the liberal application of manures.

The author of "Coffee planting in Ceylon" tells us in regard to manuring on Coffee estates that "there are many difficul-
' ties to surmount in this operation, owing to the localities of
' coffee plantations, though there can be no doubt that as faci-
' lities are discovered in practice, the returns obtained from
' plantations will richly repay all this by a high standard of
' bearing, to which we have been hitherto strangers. Cattle
' manuring is the most generally available; the cattle being stall-
' fed on guinea grass, planted where the elevation of the planta-
' tion will permit it, or on Mauritius grass, which is planted in
' the ravines amongst the coffee; thus at the same time yielding
' a profit, and keeping weeds out of places where they are apt
' to grow. Pigs are also kept, and the pulps of the coffee are

'added to the fertilizing mass; indeed, rotting wood, weeds, 'burned Dolomite, and anything which will produce ammonia, is 'now taken care of on the estate. The economical application 'of the enriching compost requires it to be carried out by hand, 'and each laborer is made to take out a basket as he goes to his 'work, which a few men are employed afterwards, with mamo-'ties, or forks, in burying around the roots of the trees.

"The whole of an estate has only in one instance within our 'knowledge been manured at one time, and it is seldom required. 'In a few years we expect to see manuring so systematically 'managed, that every part of the plantation will be brought 'under its operation every second or third year, and on this we 'base our expectation of a continued and increasing production 'from the estates already formed, far exceeding any returns we 'have hitherto seen. The estate which was wholly manured, 'without limit as to expense, has amply returned the outlay by 'a production of about 20 cwt. to the acre; lime, cattle manure, 'and mould from the neighbouring forest, were used in a com-'post, and the soil turned up every where round the plants, to 'apply it." *

Amongst the many improvements introduced into Ceylon cultivation during the last few years, may be mentioned a magnificent set of water-works, erected by the late Mr. Morton, and his partner Mr. Tytler in the Vale of Doombera, for irrigating the Rajawella estate from the Mahavilla Ganga. The plantation to be thus watered contains about seven hundred acres of coffee: the land is fertile in the extreme, but subject to frequent severe droughts, which by means of this mechanical contrivance will no longer be feared. The works are completed, and were tried a short time since with perfect success: and there is no doubt but that the outlay will soon be amply repaid in heavier crops.

At the present moment there are at least thirty establishments in Colombo for the preparation and shipment of coffee, the greater portion of which goes home in casks. The number of persons thus employed, from the reception of the berry from the estate in the damp "parchment skin," to the final shipment of the cured bean, cannot be fewer than twenty thousand, of whom by far the larger number are women.

We cordially agree with the opinions of the author of the pamphlet under notice when he says:—

"As these improvements in cultivation are perfected, we look for a large increase of production every where: influence of seasons there will be, but we shall no longer, in any case but the most neglected plantations, see the crops alternate yearly as with the untended

* Page 52.

native trees, the full production of one year exhausting the plant for bearing in the subsequent season. On the contrary, with a judicious system of pruning and handling the trees, so as to bring forward an annual supply of new bearing wood, and supplying the exhausted energies by manuring, we look for a large average yield, and consequently an aggregate export far exceeding any prospective calculation yet made. High cultivation, we hazard nothing in affirming, will prove the most profitable cultivation, and this will lead to an extended cultivation. We fully expect, should peace in Europe be maintained, and no destructive mania suspend credit, that the cultivation will rapidly increase, that the new systems will enable so much more land to be brought under coffee than was formerly considered suitable for planting. New roads will have rendered more land accessible, and the large clearances made in the forest at the high elevations, will probably so improve the climate of those localities, that a still further addition to the available land will be obtained. It is therefore not too much to expect the export, which has already exceeded 400,000 cwts. will be ultimately more than doubled; and probably, before a like period as that we have been reviewing has passed away, 1,000,000 cwts. of Ceylon coffee may be poured annually into the markets of the world."

Such then has been the career of Ceylon in the production of coffee. The Dutch, whilst accomplishing so little in this island, where so much has since been done, met with more success in Java, which to this day is one of the principal coffee-producing countries of the east.

The cultivation of the plant was commenced in January 1723 by the Governor-General of Batavia, who spared no pains to induce the inhabitants of the rural districts to propagate the berry and prepare it for market. By dint of a lavish outlay in the first instance, and afterwards by means of immunities and premiums, aided by climate and soil admirably adapted to the culture, the Dutch Government succeeded in their object, and rendered the export of coffee from Java a most valuable branch of the local trade.

From the early period we have indicated to the end of the last century, the progress made was not nearly so rapid as during the last thirty years, when the produce of this island has reached nearly a million hundred-weights. M. Munnick, the Inspector General of Agriculture in Batavia, in a paper on the subject, states that coffee was produced in twenty different departments of the island, giving occupation to nearly half a million of persons, and that there were ten years ago 350 millions of trees in the island.

The soil and localities selected for coffee cultivation in Java appear to be precisely those chosen in Ceylon: fine loamy forest land, situated on the slopes of mountain ranges, at an altitude

ranging between one and four thousand feet. The modes of culture followed in the islands differ very materially. Whilst in Ceylon nothing in the first instance is needed beyond felling and burning the forest trees, and planting the young coffee seedlings at regular intervals in spacious holes between the huge stumps left to rot in the ground;—in Java, after the ground has been thoroughly cleared from jungle and weeds, the whole has to be ploughed three or four times, and eventually rolled or raked smooth previous to being planted. Shade, which has been for many years quite abandoned on coffee plantations in Ceylon, is stoutly maintained in Java; the same care in the after cleansing of the planted land is observed in both islands. But whilst the Ceylon planters have availed themselves of every possible improvement in the cropping and growing of their coffee, by the use of valuable machinery and carefully arranged stores, the Javanese grower is content with the rude contrivances which satisfied his ancestors in 1723.

Coffee is produced in Sumatra and Celebes, the former exporting about 50,000 cwts. and the latter about 15,000 cwts. annually. The produce of Celebes is very highly esteemed in Holland, where it commands a better price than the finest Java sorts; this too in spite of the rudest culture, and a mode of preparation of the berry far more primitive than that adopted in Batavia. The entire quantity, which appears to have remained stationary for some years past, is taken by the Government from those who grow it at certain fixed rates, and by them shipped to Europe.

A small production of this berry takes place on the elevated lands of the eastern coast of Siam, amounting until recently to not more than a thousand cwts. yearly. The quality has been approved in the English and some of the continental markets, where it is thought to approach more nearly than any other description to the Mocha berry, in appearance and flavor. The cultivation of the Siamese plant is being gradually extended, and now that the rulers of that country are pursuing a liberal and enlightened policy, in regard to internal industry and improvement, and external trade, it is not too much to expect a considerable increase in this article of its produce.

Penang supplies a small quantity of rather inferior coffee to the markets of the world, but there is no reason to doubt its capability of furnishing a much larger quantity of a good article, if sufficient attention were bestowed upon the cultivation.

The islands of Bourbon and Mauritius furnish a considerable quantity yearly, especially the former; the bulk of its crop being shipped to France, where, however, it is being rapidly supplanted by the produce of Costa Rica and Ceylon.

Of the coffee culture of the Tenasserim provinces we are without any reliable data. Mysore has for a long period furnished

an article which has gradually grown into public favor in England at a medium value.

The coffee of Travancore sells in the London market at about the rate of ordinary Ceylon plantation kinds, but the produce of the Neilgherries bids fair to rival some of the better qualities of that coffee.

It is now about twelve years since the slopes of the Neilgherries first attracted attention as suitable for the growth of coffee. The altitude, the soil and the climate were highly reported upon by such of the Ceylon planters as visited the early clearings about ten years since. Labor is most abundant and cheap, and the land, although not to be bought, is obtainable for long tenures on very favorable terms. Some of the sites selected turned out unfortunate, as might have been expected, in the first instance; but experience has now enabled the planters to proceed with far greater certainty, and the result of late gatherings shews that success is all but complete. Here, as in Ceylon, the planters have the choice of a great variety of altitudes and aspects, so that if a due supply of moisture at the periods of blossoming and ripening can only be secured, they have little to fear. Transport of crops from the estates to the sea-board has been a source of some difficulty, but even this is gradually disappearing, and at the present moment we are assured the planters of this part of the Peninsula can place their produce on board ship at a less cost than can be done in Ceylon, where the transport of coffee from the Central Province plantations to Colombo averages a higher rate per cwt. than the freight to London or Liverpool.

In Lower Bengal the cultivation of the coffee plant has within the last few years made some progress, and contrary to the expectation of very many who were entitled to speak on the subject, it has proceeded with highly satisfactory results. In all the coffee-producing countries of the east, and in most of those in the west, the berry is produced on land more or less elevated, at an altitude rarely less than one thousand feet, the average being certainly two thousand feet above the sea-level. There is a little coffee produced in one district of Ceylon where the altitude does not exceed nine hundred feet, but this is a very rare exception to the general rule. The two localities in Bengal which have thus far proved favorable to this cultivation, are not more than two hundred feet above the level of the sea: the one at a distance of about two hundred miles to the north west of Calcutta, the other scarcely more than eighty miles from the capital in an easterly direction.

This latter, planted under the eye of a gentleman practically acquainted with the Ceylon and West India modes of culture, consists of a fine vegetable mould, on which trees of large growth have been found, together with a rich vegetation of jungle plants.

The system pursued has been that of the Ceylon planters, with one or two trifling modifications. The estate, which is of about one hundred and twenty planted acres in extent, contains some thirty or forty acres of plants now in their third year, wearing a most luxuriant appearance, and bearing what promises to be a heavy crop. These plants gave a small first picking in their second year, a result of which we have never heard a parallel. The berry attains a medium size, short but well-grown, with a good proportion of pea-berry.

A few sample bags were shipped during last season, and being favorably reported upon, realized fifty-four shillings in Mincing Lane. The proprietor estimates that he can place his crop on board ship at Calcutta, not costing him more than six shillings per cwt.; but this must of course depend mainly on the average extent of future crops, to pronounce an opinion on which would, we think, be rather premature at the present time. It is true the plantation is well situated for irrigation, being close to the banks of a fine river, which advantage may in a great measure compensate for occasional insufficiency of rain at critical periods; but it remains to be seen if the forcing nature of the climate of Bengal will enable the coffee plant to yield full crops during a succession of years. At any rate the prospects are most encouraging for the proprietors, who can well afford to have a certain proportion of light coffee, whilst the efficacy of manure added to irrigation has yet to be tested in this locality.

The plantation formed in the Hazarebaugh district, at a greater distance from Calcutta, promises equally well as regards quality. The distance to be traversed with the crop is greater, but it is within reach of the railway, and in a district where labor is at once easily obtained and cheap: it is situated at a somewhat greater elevation than the first-named estate, and the berry gives promise of a bolder sample. It is now in its second year, and giving a maiden crop. Whether other localities in British India may be found more suitable for the growth of coffee, and at not too great a distance from a port of shipment, has yet to be seen. There is land enough and labor enough in many directions; it has but to be seen if India can produce coffee with more advantage than other commercial staples. Without a doubt there are abundant means of remunerative employment for all her people and all her land, if justice be done to the country by greater security being afforded to capital, and if more ready means of communication be found between the plains of the South and the Delta of the North-west.

It may interest many of our readers to learn the present actual yield of the coffee-producing countries of the world, and on referring to the statement below, to remember that at the close of the last century, the only varieties known in the Lon-

don market were those from Jamaica, Grenada and Mocha, the consumption of the United Kingdom being, at that time, about one million of pounds annually. On the continent of Europe at the same period, the varieties from Mocha, Brazil, Bourbon, and Netherlands India were alone used.

The following is about the present production of coffee throughout the world:—

IN THE WEST.

Brazils	300	millions of lbs.	
La Guayra and Porto Cabello	30	„	
St. Domingo	32	„	
Cuba and Porto Rico	25	„	
Costa Rica	10	„	
British West Indies	6	„	
French and Dutch ditto	6	„	
			409

IN THE EAST.

Java	140	millions of lbs.	
Ceylon	56	„	
Indian Peninsula	6	„	
Sumatra	5	„	
Arabia	3	„	
Philippine Islands	3	„	
Celebes and Siam	2	„	
			215
		Millions of lbs.	624

The present consumption of the world, excepting of course the countries of production, is stated to be as follows:—

	Millions of lbs.
United States and British America	170
Holland and Belgium	125
German Customs Union	95
Other German States	46
France	33
Great Britain	32
Sweden and Denmark	20
Mediterranean Countries	20
Spain and Portugal	15
Switzerland	13
Russia	12
Australia and Cape of Good Hope	6
	*587

* Simmond's Commercial Products of the Vegetable Kingdom, page 42.

We have reason, however, for doubting the accuracy of this statement, and have no hesitation in saying, though we have not the figures at hand to support our opinion, that the present consumption of the world is in excess of this statement of the production. Were it not for the excessive use of chickery and other substances in Great Britain for the purpose of adulterating coffee, there would be a further quantity of twelve thousand tons to add to our estimate of the total consumption of the world. There is little doubt of there being an abundance of good land in British India, in suitable localities, capable of producing an excellent quality of coffee, at very moderate prices, and in sufficient quantity to restore the balance of production and consumption to the safe side for the consumer.

ART. VI.—1. *Modern India.* By GEORGE CAMPBELL.
2. *My Note Book.* By H. C. TUCKER.

WHEN Shakespear made Juliet ask "what's in a name?" he probably had little expectation that he was exposing himself as a mark for all the slings and arrows of young periodical writers during succeeding ages. It was the intention of "the immortal William," doubtless, to supply an ardent girl with a futile but touching argument, which might indeed be aptly used against the father of a fair De Mowbray who should be wooed by a gentleman with such a patronymic as Hogsflesh; but hardly as a reason against changing an unmeaning or an erroneous appellation—as for instance the title of an office. From such a source great inconvenience may often spring; and has sprung too before now. The term "Collector" for instance suggests to the mind of an untravelled Briton, a seedy gentleman with an inkhorn at his button-hole, or at most a portly, but otherwise unimportant being of the species Lillyvick described by Mr. C. Dickens. The word "Magistrate" again, conjures up a vision of capon-lined squire or parson, who sits in his study, or in the parlor of a public-house; Burn's Justice at one elbow, and a sharp clerk at the other, to punish Scroggins for poaching; or perchance a bald and gownless barrister in a stifling first floor room in London, trying voluble Irishwomen and extortionate "cabbies." What wonder if the British public should be a little subject to complacent error or wild confusion, when they hear that the Government of India is administered, in the provinces, by "Collectors and Magistrates!" It is true, for the further bewilderment of our home-friends, that in some portions of our empire these offices are as yet distinct, while in others the whole work of the country is administered by a Deputy Commissioner. But the whole thing is, and must be a mystery, unless the proper key be at hand: and we hold ourselves justified in using the subject of our present paper to supply that key; for the double reason that, while the Agra sub-presidency is that in which the office of Magistrate-Collector has worked longest and best, it is believed that the time is not far distant when the same system will be extended to the whole empire. The result of Mr. Ricketts's enquiries will not, let us hope, be confined to the simple statesmanship of reducing salaries; a body of information, such as he is said to have collected, will no doubt bear further fruit, in shewing the best working arrangement, and inexorably pleading for its adoption.

The civil organization to which we refer has grown slowly

out of that tentative process so familiar to the student of English History. The following extract from Mr. Campbell's work will shew the first attempts of the kind. He is speaking of the measures of Mr. Hastings :—

"The country was divided into districts, in each of which a 'European functionary presided, and was vested with powers in 'all departments, fiscal, magisterial and judicial. In the depart-'ments of revenue and civil justice, he was assisted by a native 'dewan and establishment, and was empowered to refer petty 'civil suits to Zemindars and head-farmers. In the Criminal 'department he exercised a general supervision as Magistrate over 'the district Zemindars (who were intrusted with police powers) 'to see that they did their duty, and that criminals were properly 'tried. Criminal trials were conducted by Mahommedan law 'officers, and according to Mahommedan law."

This system failed. The natives did not work well with their European colleagues; and the personal interposition demanded from the Governor-General was more than he had leisure to bestow. Clearly some other plan must be tried. Accordingly,

"Criminal justice was placed under a native superintendent; 'and to each district was appointed a native Magistrate, with a 'regular Police establishment. * * * * Civil justice was 'again intrusted to natives."

This system answered worse than the other.

Single European collectors were next sent forth (1781) "charged with the revenue management" of districts; while separate European officers were nominated to the combined office of "Judge and Magistrate in each," who "superintended the administration of civil justice and the Police: but the Mahommedan law officers were still the Criminal Judges."

All this fermentation was, however, to settle. Lord Cornwallis, the first Governor-General empowered from home on the system now in force, revolutionized the civil administration. Under a clause in his commission he united the fiscal and judicial functions in the same officer, and they remained united for some years. Nevertheless, he seems himself to have severed them; and no great change again took place till the time of Lord W. Bentinck. Nor was much needed: the executive officer indeed was still too much confused and blended with the Judge; and the complete centralization of executive authority within the district, so suitable to native notions, was not realized. Worse still, the natives themselves were scarcely at all employed in posts of trust. All that is meant is this; that the principle of European control and Asiatic agency was asserting itself, leaving matters of detail to be adjusted as occasion might suggest or demand. The country was divided for executive purposes into a

number of arbitrarily bounded districts, the average dimensions of which are shewn in the subjoined table by Mr. Campbell:—

Presidency.	Area in square miles.	Population.	Land Revenue.
			£
Bengal	3,200	1,000,000	103,000
N. W. Provinces	2,300	730,000	130,000
Madras	6,500	800,000	165,000
Bombay	4,200	600,000	160,000

These districts, in the two last named presidencies, had for some time been administered by one common head as Magistrate and Collector; and the union of offices was now to be introduced into the North West by Lord William; who at the same time made over almost all original civil jurisdiction to the natives; employing them moreover as assistants to the district-officer both in criminal and revenue matters; while he likewise introduced into the Sessions Courts certain reforms to which we need only allude.

Henceforth, as Mr. Campbell tells us, the North West is organized on the principle of uniting in one individual all the executive representation of Government. The idea supposed to be realized is thus developed by him:—

"The Magistrate and Collector is a sort of local Governor, 'and has a great advantage in his management from the combi-'nation of powers. He exercises an extended superintendence 'over his district, a great deal beyond what his simple name 'implies, and the people look to him as their immediate ruler."

He is a kind of mixture of Punch and Providence, it appears; omnipresent, with a turn for everything; often intervening to cut knots which no less dignified hand can loose; no less frequently dealing distress all round him with indiscriminate activity; trusted, as our enquiries may presently shew, in many

matters where his caprices can be very injurious, fettered in others by a Procrustean central system which hinders him from doing good; yet, in the main, grappling, like a good Anglo-Saxon, with the duty nearest him, and altogether, an indispensable kind of monster.

At length, therefore, we are come to the existing state of things. Each of the Zillahs or Districts, corresponding, it may be roughly said, to an English county, is under the general control of an officer, whose judicial powers extend from the ordinary correctional functions understood by the word "Magistrate" (in its more restricted sense) to imprisonment for three years: who as "Collector" not only superintends the payment of the revenue, and initiates the measures prescribed in cases of default; but is general Registrar of transactions and conveyances regarding landed property (in virtue of his guardianship over the Rent Roll) and has summary power of adjudicating almost all the disputes that may arise regarding land. (We shall return to these powers again.) He has also the duty of submitting a vast mass of accounts regarding the above proceedings, some of which are required from him monthly, others quarterly, half-yearly, or annually. In the Judicial Department he sends up quarterly statements of the transaction of business, extending to the most minute particulars, classifying crime, and testing the punctuality and vigor with which it is repressed. To the Commissioner of Police he submits a yearly statement in a more condensed form, accompanied by a narrative of the circumstances and termination of every heinous offence that has been brought to his notice, and followed by a Report setting forth the methods and success of the Criminal administration of the past year. To the latter functionary, in his revenue capacity, he reports on the administration in that department, and sends up all sorts of accounts, down to the fortnightly statements of collections, monthly forms shewing the progress made in the disposal of Summary suits, and a variety of others, the description of which would lead us into technicalities of a very tedious character.

Here seems likely to be work enough for one man; work too, which, however expedited by light-handed accountants and nimble christian clerks, must be severely scrutinized and tested, carefully watched, actively expedited by the district officer in person. Let us now turn to the mass of business imposed upon him (and of course under his superintendence, upon his assistants) *over and above* the sufficiently grave tasks which belong to the position, as such, of Magistrate and Collector.

First, we may notice his duty towards the subordinates above alluded to. At the head of his staff appears the "Joint Magistrate" (and Deputy Collector.) This is a gentleman of from

five to fifteen years' standing in the service, exercising, under the general control of his superior, the* full powers of a Magistrate. Now, to control an officer of this sort, to restrain the fiery zeal of a young one, new to the exercise of his great powers, to stimulate the flagging zeal of the dispirited veteran, who has been passed over in promotion and is losing his self-respect, is, at the best, a delicate task. The practice of late years introduced has been to confide the charge of a subdivision, say one-half of the district, to the "Joint," who, in his twofold capacity then becomes, towards the people at least, the district officer of that portion. But Magistrates are men; some are jealous, all are hag-ridden with responsibility; if the co-ordinate subordinate be not given rope enough he will not work heartily, or love his superior; if he be trusted too far, the latter does not know what is going on. One Magistrate therefore sends privately for his "Joint's" cases and overhauls the record; another leaves him alone, till some fine morning he has to report to higher authority on some instance of over-zeal, ignorance or neglect. There is no escape for the poor soul.

Next comes his Assistant,—in districts where the article is kept—and the trouble is double, to say the least. This young gentleman has, on first joining, the feeblest conceivable amount of authority; can imprison a thief for one month, or under circumstances for two; in misdemeanors has half that power. All other cases must go to the superior for confirmation.

But worse remains: he has to prepare for his examinations; has to pass two of those ordeals before he enters the promised land of "full powers." Now these examinations seem to involve that the Neophyte should be able to abound in book learning, should shew that particular kind of memory which is fluent in numerical accuracy (not confounding Regulation IX. of 1807 with VII. of 1819) and should construe and apply the law in imaginary cases in the exact way that it would be likely to be construed by the individual and collective wisdom of the Dons who constitute the Central Committee. He is also required to read the jargon of the Courts, a language combined of Persian, Hindee and English, in a stenographic character which he will never afterwards get sufficient opportunities to practice the reading or writing of, to enable him to decypher a page in a week. And these examinations he must be made to pass, or the phials of wrath will be shattered about the ears of that involuntary Squeers the Magistrate, who knows moreover that if he availed himself to any great extent of the labors of his assistant in their

* An injudicious attempt was made, a few years ago, to render the Magistrate responsible for the Joint Magistrate's committals; but it is understood to have generally broken down and to have been tacitly abandoned.

legitimate sphere—the Court-house—he would never coach him through the Little and Great "goes." The reader may judge whether the assistant is likely to be of any great value, or whether he will not more than repay it in increased trouble and responsibility.

Following Mr. Tucker's classification of magisterial duties, we next come to his "general powers and cognizance;" and 1st, as to persons. Here we find him ex-officio family friend to the public at large. Is a husband treated as Menelaus was by Helen, he is to go to the Magistrate, who is to send for the wayward beauty, and endeavour to persuade her to return to the path of conjugal rectitude and the bosom of her Luchman Purshad. If she refuses on the score of his not giving her enough food to eat, or clothes to wear, he, (the Magistrate) must make a proper arrangement; does she refuse, he is to make, with regard to the children "that arrangement which in his discretion may accord with the circumstances." Turning from these charities of the hearth, we find our universal philanthropist has to look after gaming-houses, to prevent the placing of pig's blood in Mosques (the faithful appearing rather to object to that early favorite, the black-pudding) to punish duelling, and to be omni-vigilant in the detective operations of the Police.

2nd. As to Things. He is to preside over the destruction of useless records; and to cause the removal of unlawful obstructions and nuisances. This latter is a somewhat curious process, and we may dwell upon it for an instant with advantage to ourselves. The Law (Act XX. of 1841) provides that our friend the Magistrate is to enquire into the nature of the nuisance or obstruction; and if he think proper, to issue an injunction directing that it be removed. Within ten days the proprietor may demand that his cherished hedge or darling dungheap may be tried on its merits by a committee of arbitration; but if this be not resorted to; or, resorted to, fail to give reprieve, down must go the nuisance, on pain of a fine of 200 Rs. The Magistrate then removes the nuisance himself, reimbursing himself from the money raised by selling the *materials*. Now, here we seem to have as good a specimen as could be desired of the brick-making without straw, which seems so generally expected of our much-enduring friend. It is here, we find, assumed that "nuisances and obstructions" are necessarily valuable articles, commanding a certain market price. But how many nuisances are there, like Colonel So and So's temper, which are of "no value to any one but the owner." What is likely to be the value of the materials of a mud-wall? Of a decayed earthen well?—the usual sort of nuisance, we should suppose, the last named being actually cited as an illustration in the Act, as a kind of thing to be filled up. What profitable material would be

obtained by filling up a well, wherewith to recompense with bread the sweat of the laborers' brows? And all this time there is the fine of Rs. 200 credited to Government, out of which the Magistrate must not spend a *cowrie*. We conjecture that this is the only resort left him, that after the ten days, and the arbitration, and the removal of the nuisance, he sends for the defendant, and addresses him in some such form of words as this:—"My friend, you have incurred liabilities to the tune of Rs. 200. I have been likewise let in for Rs. 50 in filling up your well, removing your cess-pool, and otherwise rendering you inoffensive to the public. I shall record against you the full amount of fine, unless you will pay me 50 Rs. in hand, when I shall only put you down for Rs. 50 in my Fine statement. You will thus clear Rs. 100 by the transaction." We will suppose the defendant does this, and does *not* go away and tell every one he has compounded for indulgence from the full penalty by giving His worship a *douceur* for himself; yet what a cumbering circumlocution-office kind of affair it has been, at best; and how long could such a state of "powers as regards things" go on, if such cases were reported every morning in *The Times?*

To conclude, a person must have full powers of Magistrate to decide under this Act: that is the Magistrate must do the whole in person unless he has a Joint Magistrate. He is moreover to preserve and protect the public roads; and let us add that it is within the personal recollection of the present writer, that the Sudder Nizamut, on appeal, reversed, as illegal, an order by a Magistrate fining parties for cutting water-courses through the high road, by which not only were the lives of persons at large put in jeopardy; but the *Commissioner* himself, on his annual tour through the division, had suffered fracture of the buggy-springs! The Magistrate is next represented under the pleasing aspect of adjuster of private differences between next door neighbours, though here occurs a difference, the Calcutta Court holding that he ought, the Agra Court that he need not, interpose to prevent a butcher from carrying on his useful mission "in immediate proximity to the residence of a Hindoo." He, the Magistrate, is likewise at liberty to issue "wholesome restrictions on the conduct of such unpopular animals as swine;" but the Court demur to "the comprehensive measure of shutting them altogether out of a town." This is a delicate function: to control the unpopular excesses of swine, yet draw the line on the hither side of utter exclusion. Surely this is a task worthy of the local statesman! The following cheerful list of addenda, which a construction of 1847 has excluded from the

operations of a particular Act, suggests a farther train of reflection:—

"Cases of opening windows looking into a neighbor's *zenana*; 'opening a new privy (which annoys him); building a new house, 'the spouts of which injure his thatch, or threaten his founda-'tions; harboring pigs (again!) etc. etc." What the etceteras involve is too fearful a question to be pursued. The barber in "Nicholas Nickleby" drew the line at bakers, we wonder if the Magistrate is allowed to draw his at pigs.

We next come to the head of punishments, the severity of which, previously glanced at, must put three-fourths of the reported crime of the country under the cognizance of these tribunals. The only crimes that *must*, if proved before the Magistrate, lead to the accused being committed to the Sessions, appear to be these; Murder, Homicide, Burglary with Wounding, Rape, Perjury (which certainly ought to be left optional, for in slight cases a light and instantaneous punishment is the thing required) forgery, and one or two other offences *contra bonos mores*. The vast proportion of Cattle Thefts, Burglaries, Larcenies, Affrays, and Trespasses, that diversify the daily life of an agricultural population, are tried at once, before a single Magistrate, and, unless appealed against, his sentence, which may extend to three years' penal servitude, is final.

Furthermore, he has the following odd collection of punitive duties. *Mangies* of ferry boats, guilty of gross negligence, may have six months, or a fine of two hundred Rupees. Persons cutting an embankment erected at government expense may be punished for a misdemeanor. For inducing natives to emigrate, two hundred rupees for each adventurer so tempted! The Magistrate is to punish the users of short weights, though he cannot prescribe a standard of what is full weight; so how he is to prove his *corpus delicti* seems a little dubious.

The Procedure rules are no less complicated and harassing. The Magistrate must not hold Court in his own house, thus limiting his usefulness to those hours of the day when he is at his office, and making his work depend on the state of his health, and of his stables, to an extent that we should imagine must often become a source of inconvenience. At least we have heard that a contrary rule has been loudly demanded by those who have business to transact with a somewhat similarly empowered class of officers—the Levantine Consuls. Then again, though he is two single gentlemen rolled into one, he must, on no account, hold office at the same time in the judicial and revenue departments: but at two P. M. must read, as Collector, proceedings addressed by himself in his Magisterial capacity at eleven. He

tries his cases, as we have before said, alone. No Magisterial Meetings, or quarter Sessions, seem to have been ever contemplated; the Magistrate has no power to empanel a jury, or call on the aid of assessors. Surely it would be a simple matter to prescribe that three of the authorities of a judicial union, as a quorum, should meet once a month for the trial of persons whose crimes if proved would involve a punishment of more than six months, say;—(any limit of the kind would have the same kind of effect). A check was attempted, of a less valuable character, though not to be despised, in Act XXXVII. of 1854, which provides that every decision, sentence or final order shall be written by the deciding officer in his own vernacular, and at the time of passing the same. This he has also to render (if an Englishman) into the Urdu of the Court. He has already been obliged to sit by watching the scribe as he recorded, one by one, the depositions of the witnesses; or he has recklessly been engaged in other work while supposed to be so watching: let us hope the former is the rule, the latter the exception. Each deposition has then to be read out before the witness and attested. A slower process, one less likely to meet the ends of justice, could not be conceived. The best record of a case, the best test of the Magistrate's attention, would be a clean note, in his own hand-writing, of the points in each deposition bearing on the issue, with a brief summing up and the sentence. The rest is worse than useless. But even this would be of avail only in slight cases; the imposition of heavy punishments, such as two or three years' labor in irons, ought not to be left to the caprice of one individual, and that the original chief constable and head detective who first enquired into the case, and ran down the (supposed) criminal. Hence it would also arise that the facility of appeals on the merits, which introduce such distressing uncertainty into the administration, would become needless; the prejudices or prepossessions of the particular Magistrate who carried through the preliminary enquiries would be harmless, or would serve to counteract the characteristic listlessness of others; and the right of general appeal on the merits of a decision might be at once swept away.

But we must not linger over these more purely judicial points, much as they seem to need reform. We must suppose them to be awaiting the final promulgation of those long promised Pills and Ointment, the Penal and Procedure Codes. But there are many duties still remaining, at which we have not yet glanced; yet which more especially belong to our present programme. There are duties regarding the Superintendent of Police (the Commissioner in his criminal aspect) of which we shall, here, only remark that they are even more annoying in practice than in precept; regarding the Sessions Judge, which are less anomalous—except that

the care of the Sessions Court-house, when not in use, remains with our versatile friend; duties regarding himself as Collector, which we suppose are usually performed without misunderstanding or dispute; regarding the Supreme Court of Calcutta; the Civil Courts; and the Inspector of prisons: and here we must call another halt. The Magistrate (conjointly with the Sessions Judge, but in practice alone) has the control of the local jail; except that in the management thereof, he is entirely bound by the central system administered by the Inspector of prisons, N. W. P. The education of the prisoners in reading, writing and arithmetic (the venerable three Rs.) their training to manufacturing pursuits and other useful handicrafts, are all to be watched and reported on by him; nay, so far is this carried that we believe he alone (with the joint) has the legal privilege of witnessing the caning of refractory convicts. He is also to regulate the distribution of the out-door working parties, and to look after the diet of the "institution." But he is above all, to report minutely both monthy and yearly to the Inspector. There are a number of rules regarding duties with respect to the Military Department, many of which are very proper: and some others regarding the Medical Officers; the Magistrate is also informed that he should not mind a little trouble and responsibility (having naturally so little of his own) in forwarding letters received from the Post Office! Letters being received and distributed at all Police Offices, with an additional postage of three pie on each. These moneys are to be kept in deposit by the Collector, and disbursed (by consent of the Postmaster General) on Post Office purposes. Here is another of the district officer's *Masters*, to whom he has to forward a monthly register. We may also mention that we have heard a rumor to the effect that, though rules five and fourteen of the Notification of 30th October 1854 distinctly state that no farther charge is to be levied but the three pie on stamped letters; the Post Office authorities expect the district officer to levy on the total rent-roll of the district a cess of 2 annas per hundred rupees for the above purpose!

With regard to the Police, a number of rules, some very sensible, have been drawn up. The general conduct of a Police enquiry is however radically vicious, and we are glad to hear that there is reason soon to expect an ample reform. Fancy every constable having a power of enquiry, with authority to record evidence (which is afterwards upset in Court as not given in a Court of record) to receive confessions, and to acquit (conditionally on the Magistrate's order, which is passed on the Police report itself.) Formerly these officers were accustomed to have their zeal stimulated by threats of suspension and dismissal, a practice which

no doubt often led to strange proceedings, and has since been strictly forbidden. So has the practice of an officer from the outlying station accompanying a prisoner who has there confessed his impeachment: and other stringent rules and practices having been introduced, it is now often found that such prisoners totally ignore their *Thàna* confessions, and ascribe their record to fraud or violence. Believing as we do that the practice of torture (to the very moderate and circumscribed extent to which it can be proved to exist in these provinces) is almost wholly to be traced to the natural but improper anxiety of the Asiatic Dogberry to obtain a strong case that shall lead to conviction, we are not disposed to anticipate complete reform from any of the palliatives that have been lately adopted, as long as the power of Police enquiry (in the present sense of the word) exists at all. What we should like to see would be that a prosecutor should have the option of demanding the search of premises and arrest of person of any one whom he suspected; or of invoking the aid of a special class of officers selected, set apart and well-treated for this particular office. Stimulated by the hope of promotion, and by the offer of a handsome present from the prosecutor on recovery of the property, our young detective (reporting of course to the Magistrate) sets to work, taking down the vaguest *proces verbal* compatible with clearness, and forwarding day by day a counterpart statement of the same to the Magistrate. On the crime appearing to be brought home to any one—or in the case first supposed, on the prosecutor's request for the arrest of a suspected person—he should be sent in, without having *been asked any questions*, and the prosecutor and witnesses examined on the spot should be subpœnaed to attend the Court on the earliest possible day.

The Magistrate is also standing Commissioner *De Lunatico Inquirendo*, and has to enquire minutely into the state of mind of any person accused (so to speak) of being of unsound mind. He is likewise bound to adjust summarily all cases of disputed possession of lands, premises, water, fisheries, crops, or any other produce of land in which either breach of the peace may be apprehended, or forcible dispossession be shewn to have taken place. This is the famous Act IV. of 1840, which we should approach with unlimited terror, were it not for our belief in the subjoined statement. Namely, that after having converted the Court of every Magistrate into a Small Cause Court for the trial of the most unfathomable issues in the most unsatisfactory manner; and after having caused more diversity of practice, and more perplexing rulings and explanations by the higher Courts than any other ten laws put together: it has been condemned both by friend and foe, in principle as well as in practice. Not

that some provision was not requisite, and that this was not most benevolently introduced: the general, though disastrous recourse that has been had to it shews this; but the whole thing was an admission (in thin disguise) that our Civil Judicature was inadequate and unpopular; and it has only lingered on from the dislike of the Legislature to make *ad interim* laws when the new Civil Code was hourly expected. It is now sincerely to be hoped that the protracted parturition of so many English and Indian Jurists may bring forth something in their behalf, to match with the very simple Criminal Code now so shortly to become the law of the land. With the active procedure in prospect for the Dewanny, and an intelligible plain Code, there will remain no excuse for saddling the poor district officer with any more of this kind of miscellaneous duties.*

To resume the thread of our necessarily somewhat disconnected and meagre analysis, which may now be closed in a very few words, as regards the district officer in his Magisterial capacity; —on the march of troops the Magistrate is required to cause the Police to give every assistance to the Collector's people (rather circumlocutory again) in procuring supplies and adjusting quarrels; to adopt all legal means to put an entire stop to the pressing of porters for the service of the troops;—(how coolies are usually induced to such service is not known to this writer)—and to strip all persons dressed like sepoys. The meaning of this latter astonishing order being that no persons, not even sepoys themselves—when travelling off duty, are at liberty to wear a military uniform. So much for the Magistrate; let us turn to his *alter ego* the Collector.

The Collector's strict duties lie in the supervision of the payment of the Government dues, chiefly from land. In the North West, as in India generally, there is but little actual taxation, in the European sense of the word. The people, though well off according to the scale of their wants and habits, are poor enough in the matter of *cash;* and the fabled wealth of Ind (not to say of Ormuz and Stamboul,) seems chiefly to have consisted, as far as it was real, in such gold and gems as could be collected by plunder and oppression, to deck the throne of the sovereign. The majority of the people are viewed as the tenantry of the state, and what they pay as rent forms the public revenue. Under native rule, this was all that could be got; under us it is fixed for a term of years. This is a simple direct system; and, whatever its faults, is habitual to the people; and,

* It is to be hoped that these considerations are the reasons why the second reading of the "Criminal Code Bill" in the Legislative Council contained no provisions for those constantly recurring *quasi* civil difficulties between master and servant (already included in our criminal law.)

we have reason to believe, as agreeable to them as such a thing as contributing to the revenues of Government can be to those who pay. There are also a few taxes, chiefly levied on luxuries, and a stupendous system of accounts. Then follow the record and registration of the rent-payers, and the description of the assets, in which particulars the Agra presidency has probably outstripped all existing Governments. There is also the care and conservancy of the assets, in a country whose acres slip into the rivers by night, while other villages rise in the morning to find their area increased by so much fine meadow land. There is the Treasury department, involving the care of the proceeds of the above-mentioned taxes, until the balances find their way to Calcutta, or elsewhere; and rendering necessary a further labor in the management of bills, notes, remittances, rupees, guards, carts, tumbrils, &c. There is the pension department, a large one, when it is remembered how vast a native agency must be employed, each of whom enters young, and gets a pension when superannuated; not to mention stipendiary payments to deposed chiefs and political dependents. There is a department also of Civil Judicature in the Collector's office, where summary suits are heard and decided; either directly, or on the report and record of an inferior officer; regarding distraint and replevin, rent, execution and ouster. There is the education and management of the putwara, or village accountant, who has to be qualified to make all surveys, and keep all registers, necessary for the internal well-being of the village-communities; and a memorandum from whom is a necessary exhibit in lodging a summary suit. There is the execution of the decrees of the civil tribunals relating to land, and the sale of such property as may be attached thereby; as well as of that liable to Government demands: the latter process being, however, but rarely resorted to. The Collector has to hear appeals from the lower officer's decisions; to conduct suits in which Government is a party before the Civil Courts; to furnish (as before mentioned) a perfect legion of statements. He is also "responsible for all the official conduct and actions of his subordinates, and is bound to give them complete instruction in all branches of their duty, and to maintain an effectual control over them. He should develope their characters and form them into valuable officers of Government." The words are those of the late excellent James Thomason, in a Manual for Collectors, which he put forth while Lieutenant Governor of Agra. We may be suspected of vaguely heaping up nominal duties which are in reality, slurred over; but such is not the case. Thus, for instance, *with his own hand*, the Collector records in English, the final decision he may pronounce in the investigation of rights

and records, of boundary disputes (under Act I. of 1847); of offences against the excise; enquiries into rent-free titles; as well as in all the branches of summary Judicature enumerated above. It was stated by Mr. Thomason, in the work already quoted, that nothing can pass in the district of which it is not the duty of the Collector to keep himself aware, and to watch the operation. The vicissitudes of trade; the state of the currency; the administration of civil justice; the progress of public works. This offers him rather a large field of observation, on the whole, we may as well say.

Mr. Tucker's book, so much consulted during our present enquiries, is a quarto volume of 568 pages, which only addresses itself to the office of noting in abstract the principles, rules and regulations applicable to the duties of a Magistrate and Collector's office. It will therefore be at once felt that we have no prospect of including them all in our present notice; nor any such horrible intention as that of inflicting on any kind reader who may follow us so far, an exhaustive account of all the work performed by the district officer. But there are two branches of his miscellaneous duties which will well bear to be dwelt on a little; for their exceeding importance gives them an interest to the good Collector, which causes them to make large demands on his attention and his leisure. We allude to road-making and education.

The interior traffic of the North West Provinces is provided for from two distinct sources. The first is "one per cent. on the land revenue, which under the contract entered into" at the time of the settlement, is contributed in lieu of the personal service formerly demanded from the proprietary bodies by Asiatic customs. The second, the "Ferry Fund" consists of the income raised from the ferries across rivers; and is appropriated by law to the improvement of the means of internal communication. By a resolution of Government, dated 10th February, 1841, Local Committees have been formed in the several districts to superintend "the disbursement of these Funds, which the* authority we have been following states to have been, ten years ago, equal (with the added labor of 10,000 convicts) to a sum total of Rs. 6,50,000 annually, or £65,000 sterling. This amount is probably nearly stationary. The wages of labourers at the same time are about eight shillings a month, so that the sum represents perhaps something near to (£2,00,000) two hundred thousand pounds sterling of English money." The occasion of Mr. Thomason's describing this state of things was, when the Hon'ble Court of Directors, in their despatch No. 2, of 1845,

* Thomason Despatches, vol. 1, p. 438.

Public Department, dated January 22nd, recommended the appointment of a "Superintendent of roads, bridges, and tanks" for the North West Provinces. Mr. Thomason, at the instance of the Governor General, applied himself to the subject, and in the second letter published in the volume just cited (dated 10th September, 1847) submitted a detailed plan formed in consultation with Lieutenant Colonel F. Abbott, the then Superintendent of Engineering for the provinces. We shall first offer a slight sketch of the existing state of things (which in spite of the above-mentioned proceedings was not altered) and then shew how, in our humble opinion, the views of the Court and of the local authorities then consulted could best be applied to practice.

The Magistrate-Collector is at present the usual executive, financial and generally working member of the Committee. To him are entrusted, under the respective titles of * Vice President and Secretary, the duty of superintending the repairs of old lines, and the making of new: often involving the throwing of masonry bridges over rivers of considerable breadth and water-power: the preparation of plans and estimates: and the checking of expenditure and accounts. He has been further required, of late years, and very properly, to attend to the repair of the minor lines of communication between the villages in the interior of his district, and their adjacent market towns. Once a year, at least, towards the close of the periodical rains, (viz., about 15th August) he calls together the remaining Members of his Committee, and reports progress. The accounts are passed; no one cares about what is going on (or knows much indeed) except the resident Engineer Officer, who is either the Vice President's bitter and able antagonist, or (as we would hope more frequently happens) his sworn ally. These proceedings are recorded, and a copy of the record sent, with statements of the most excruciating and hopeless simplicity (and incomprehensibility) to the Commissioner; whose duty again it is to forward them with remarks to the Secretariat. Here they are again passed in review; and the prudent Magistrate, who waits for the final decision of Government on his proposal for improving and maintaining the internal communication of his country, finds them all substantially supported (whatever trifling alterations may be added to shew that his superiors are up to their work) and that his working season is going by, earth becoming hard, and time insufficient to complete the work. It will be farther remarked that the proceedings having been chiefly inaugurated by a man

* The Divisional Commissioner being ex-officio President in each district of his division.

who knew nothing of the general subject of road-making, though he has local acquaintance with the *places* (which is something), have to be tested, modified or approved by two others who know little of either subject *or* place.

Now the appointment of a General Superintendent for the N. W. P. would cure these defects, and might, we think, be also a means of maintaining the present local system in greatly increased efficiency. The Committee might be reduced to a very simple board of works for each district; viz. the Collector and the Engineer. A road-map of each district should be prepared, on which should be drawn;—1st, the natural conformation of the country, drainage-lines and other natural incidents; 2nd, the existing lines of road, colored according to class, and only shewing the terminal towns, or very important stations passed. Yearly the Engineer should forward to the* Central Office a copy of this map, accompanied by a full report on the operations of the past year, the state of the works, the receipts and disbursements, and the repairs requisite during the coming season. He would also have upon the map, in pencil, the proposed new lines of communication, appending the district officer's minute on the social, statistical, or other considerations rendering each such work requisite. The Central Superintendent, himself a locomotive officer, with his attention and previous training exclusively applied to this one subject, and assisted by a competent Secretary, like himself a professional man, would test with all speed the relative wants of each district; and would allot to each its due proportion of the† Funds. This plan, we believe, would steer the true path between leaving all to unprofessional caprice, and the opposite extreme (both of which are dexterously united in the present calamitous system,) of fettering the local authorities by an irksome and useless control.

Our universal friend has also duties of schoolmaster at large, over and above those regarding his subordinates which we have mentioned above, and which have been frequently insisted upon by superior authority. In this, as in all things, Mr. Thomason made his plans with that practical vigor which was the natural result of his singleness of purpose: undeterred by the conflicting considerations which confuse the speculations of "large minded men," he viewed everything in the one light which shone so strongly on his own position—that of the Great Revenue Officer of the time and country. The first remark in the

* The Sudder Board of Revenue, Agra; of which the Superintendent would be a member.

† Objection might be taken to the one p. c. fund of one district being spent in another. This we believe, in practice, would never occur. The Ferry Fund allotments would suffice 'to remedy inequalities.'

first state-paper he is known to have written on this subject is this—"The great want of the most elementary education is daily felt. *Putwarries* are scarcely able to write their papers intelligibly*, and the people are seldom able to read them or to check them." (Letter to Government of India 27th September, 1845.) The whole despatch harps on this one string. This plan was to work through indigenous schools, teaching accounts and matters connected with land, to the sons of small proprietors and cultivators, through a schoolmaster supported on rent-free land. The Zemindars were to name the teacher, the Collector to examine, and (in case of approval) to appoint him; and the Collector or one of his staff was to be the visitor of all schools throughout the district (Memo. forwarded with letter to Government of India, 18th November, 1846. Thomason Despatches, vol. 1, p. 332.) Conceived on such principles, the scheme of indigenous education became bound up with the Revenue administration, to an extent which must have been as harassing to the Collectors, as it was unintelligible to the general public. Parts of this scheme were modified in practice, the *jaégeer* was commuted for a cess of one per cent. on the Government demand of land revenue —thus making the village pay instead of the Government. So far an important change. Still more important has been the putting the whole superintendence under an inspector or director general, with divisional subordinates, and a competent staff of native assistants for the work of the district; still part of the scheme as eventually matured includes a model school at each Tuhseel;† the Collector is always a member, usually an active one, of the Committee of Public Instruction, and is constantly liable to be corresponded with officially by the director-general or his divisional officer. It may be thought that we write these last words in an unduly bitter spirit of complaint; but let it be remembered that the prefect of a district has the following amount of superiors, all of whom have the power (which they freely exercise) of writing to him, officially and otherwise, calling him to task, or demanding information. "1. His Honor the Lieut. Governor, and his Secretariat. 2. The Sudder Nizamut Adawlut or High Court of Cassation. 3. The Sudder Board of Revenue. 4. The Commissioner of Revenue. 5. The Commissioner of Police. 6. The Sessions Judge. 7. The Post Master General. 8. The Accountant. 9. The Civil Auditor. 10. The Inspector of Prisons, N. W. P. 11. The

* Village accountants above mentioned, through whom the Collector becomes acquainted with the revenue affairs of the several estates under him.

† Office of the native Sub-Collector.

Director General of Instruction, N. W. P. 12. The Chief Engineer. 13. The Superintending Surgeon. 14. The Director General of Canals, N. W. P. 15. The Superintendent of Stationery and of Stamps: together with less frequent communications from many corresponding offices in the Government of India or of Bengal.

Let us take breath. Here are two or three notable things, which if they are not made clear, this paper has been written in vain.

First, there is a wrong nomenclature, a fruitful fountain of misconception and false action. The Magistrate and Collector should have a more significant and a more convenient title. Several changes have been proposed. There is the Punjab fashion; but to this it is objected that Deputy Commissioner merely implies that the official so called is the locum tenens of one whose own designation betokens something of a temporary and occasional character, Commissioner having that meaning in England. Then there are the French terms, Prefect and sub-prefect; but then they *are* so French. English people would never understand them, and the natives will accept any foreign word; 'tis a part of their nature (singular, but undoubted, so we need not stay to consider them in the matter.) On the whole it does appear to us, reviewing the nature of the system, that the two titles "Superintendent of Division" and "Superintendent of District" would be the best that could be chosen. In practice, the present customary word "district officer" would still indicate the subject of our present enquiries, while the superior, if retained, would be similarly styled "division officer."

If retained; for this is also considered an open question. In Madras and Bombay the Commissionership is not known, in Bengal it is purely a matter of revenue; it is in our own provinces and the sister territories of the Punjab and Oude that the complete spectacle has been shewn of an official standing between the Heads of Departments and the representatives of Government in the districts; undoubtedly having less power of acquiring local information than the latter, not improbably having an occasional tendency to mislead the former as to the motives and merits of the district officers; compelled to vindicate his own character for activity by perpetual and restless interference; extending that interference sometimes into judicial matters, and others clearly not within the scope of his Commission; yet for all that forming a serviceable, according to some, a necessary link of communication between the Government and its executive. That such a medium is not indispensable we may see from the instance of whole presidencies which know it not; whether it be salutary, depends partly on the amount of centralization we

consider desirable. All due care should assuredly be bestowed against the operation in any particular district of individual freakishness or imbecility; whether the best way of so doing be to set one officer with complete responsibility in five districts over another with the same in one;—this seems the real question.

Meanwhile, there can be no doubt that the district officer might have fewer irons in the fire, and yet continue to be, as he is now, the real working man, the pivot of administration. Some of the remedies we have spoken of in passing. An important one would be the lessening of his Small Cause jurisdiction. He might be constituted the head and supervisor of Civil Justice in the district, as he is in the Punjab, with power to hear appeals, or under certain circumstances, to hear original suits; but it should be part of a system. At present, it rests with himself whether he will hold Court only twice a week, or will dispose of three-fourths of the civil business of the district. With the multifarious and important duties of statesmanship which are incumbent on him, we do not think he should be put in such a position, that this kind of spurious equity-practice can be with any degree of ground expected from him. And we are glad to see that the proposed new Penal Code pointedly omits several quasi-civil provisions contained in our present criminal jurisprudence.

Of course it is quite absurd to pretend that one man really does all this work. But he is held answerable for it; answerable for every copper of public money in the hands of his Deputy Collector, for every stroke of a rattan inflicted by his assistant, for every fractional error in the most trifling account prepared by his clerk. And the responsibility is borne—cheerfully though not recklessly—and men grow prematurely grey and wrinkled; men of taste and learning abandon their pursuits; men of sentiment and feeling surrender their family ties and their native country; and manfully accept the task of carrying out the unflagging, though perhaps sometimes fussy, beneficence of the most devoted and assiduous Government that India ever witnessed. And it is at this especial moment of time, when all these tasks are increasing, along with the centralized vigilance which exacts their most complete possible fulfilment; when the immense extension of surface by the annexation of the Punjab and Oude is thinning to an almost unsafe degree the *personnel* formerly available for much less work; that the Home Government interposes to curtail the emoluments of a service which does not, we believe, cost three per cent. of the revenue of the country. There was a time, it is true, when the Customs' Officer at Allahabad drew 7,000 Rupees a month for signing Permits for half an hour after his breakfast; and at this instant

there is many a brother officer in the army who has hardly enough pay to keep body and soul together; but what do such facts prove? Surely the scale of salaries paid to men who are to do such work and bear such responsibilities as have been above feebly sketched, depends upon other considerations than these, that some people (with quite other duties) get too little, and others (at quite another time) got too much. If the whole administrative establishment is cheap and efficient, the principle of *quieta non movere* (or "let well alone") has much meaning. It is true the same aggregate sum might be given, and divided among more hands; but this involves a departure from the approved system of controlling agency, which is not the hypothesis, does not seem desirable, and is not spoken of as intended. And, lastly, there is Lord Ellenborough's unrefuted argument; that a man after spending the best thirty years of his life in one of the most dreary and complete states of exile, and in one of the most abominable and wearing climates the world can produce, has saved less for his retirement, and made less provision for his family; than one with fair advantages who has been pursuing a liberal profession in his native land.

ART. VII.—1. *Yarrell's History of British Birds,* 3rd edition, in three volumes. London, 1856.

2. *The Birds of Europe.* By JOHN GOULD, &c. &c. 5 Vols. Imp. folio. Concluded in 1837.

3. *Manuel d'Ornithologie, ou Tableau Systematique des Oiseaux qui se trouvent en Europe, &c.* Par C. J. TEMMINCK, Membre de plusieurs Académies et Sociétés savantes. Seconde edition, 4 tomes. Paris, 1840.

4. *Revue Critique des Oiseaux d'Europe.* Par MONS. H. SCHLEGEL, Docteur en Philosophie, Conservateur du Musée des Pays-bas, &c. &c. Leide, 1844.

5. *Ornithologie Européenne, ou Catalogue Analytique des Oiseaux observés en Europe.* Par C. D. DEGLAND, Docteur en Médecine, &c. &c.; 2 tomes, Lille, 1849.

6. *Faune Ornithologique de la Sicile, avec des Observations sur l'Habitat ou l'Apparition des Oiseaux de cette ile, soit dans le reste de l'Europe, soit dans le nord de l'Afrique.* Par ALFRED MALHERBE (de l'ile de France). Metz, 1843.

7. *Catalogue Raisonné d'Oiseaux de l'Algérie, comprenant la Description de plusieurs Espéces Nouvelles, &c.* Par M. ALFRED MALHERBE (de l'ile Maurice). Metz, 1846.

8. *Scandinavian Adventures, during a Residence of upwards of twenty years, representing Sporting Incidents, and Subjects of Natural History, and devices for entrapping Wild Animals, with some Account of the Northern Fauna.* By L. LLOYD, Author of 'Field Sports of the North of Europe.' 2 Vols. London, 1854.

THERE are few persons, we apprehend, other than professed zoologists, who have an idea of the extent to which the feathered inhabitants of the British islands are found, identically the same in species, in this torrid clime; and the appearance of a new and third edition of the admirable work of its kind before us, placed at the head of our list, and which its much respected author only just lived to complete, prompts us to devote an article to a subject of enquiry new to the *Calcutta Review,* albeit, we trust, of interest to a large class of its readers.

In general, so limited are the opportunities which an ordinary Indian life allows for *field observation,* that the only familiar reminiscence of home which an European sojourner in the plains of India will recal to mind, among the feathered tribes of this country, is afforded by the pretty, little, clean-looking, sprightly Water Wagtail, usually the first and most welcome harbinger of the com-

ing cold weather, and remaining with us so abundantly whilst it continues. This bird, and the harsh chattering of a very common kind of Shrike *(Lanius superciliosus)* in our gardens, are regularly the earliest intimations that most of us receive of the coming change of season; but a Snipe *(Gallinago stenura)* precedes them, which, though few sportsmen discriminate it from the common British Snipe (which makes its appearance somewhat later), is nevertheless a different bird, at once distinguished by having a set of curious pin-feathers on each side of its tail, whereas the British Snipe (which is equally abundant with us) has a broad fan-shaped tail, as unlike that of the other as can well be. The pin-tailed is the common Snipe of the Malay countries; and is unknown in Europe, excepting as an exceedingly rare straggler from its proper habitat, the east. But the Snipe is unobserved save by the many who delight in exercising their skill in shooting it, or who wonder to see it so soon in the provision-bazar; and our little piebald friend the Water Wagtail, in its season, and the common Sparrow at all seasons, so abundant as to be overlooked and forgotten, are probably all that the European reader, unversed in the study of ornithology, will be able to recal to mind as yielding associations of home; unless, perchance, he may also recollect the common small Kingfisher of this country, which differs from the British bird only in its more diminutive size.

We have somewhere read of the delight expressed by one who had been many years in India, at seeing, upon his return to his native land, the Sky Lark rise from the sod at his feet, and mount higher and still higher, till reduced to a mere speck in the heavens, or utterly lost to view, all the while making the air ring with its music. Had he ventured forth into the fields of any part of India, he would have seen and heard the very same; although the species (*Alauda malabarica*) is different, and may be somewhat inferior to the European Sky Lark in song, so far at least as regards variety in the notes; but there is really very little difference, so little that the two birds could assuredly not be distinguished by the voice alone, nor by the mode of flight. Examined, the common Indian Lark may be described as resembling the European Wood Lark in size and shape, with the plumage of the Sky Lark. It may, indeed, be remarked that even the Pied Wagtails of India *(Motacilla luzoniensis* and *M. dukhunensis)* are specifically different from those of Europe *(M. alba* and *M. Yarrellii)*, however similar in appearance and habits; but the Grey Wagtail of Britain *(Calobates sulphurea)* is identically the same in India and Java, and we have seen a specimen contained in a collection from Australia (where, however, this species has not been observed by Mr. Gould, nor by any of his numerous co-adjutors in that country). We have seen this delicate little

bird, so clean and bright in its appearance, tripping about over one of the filthiest black drains in Calcutta; and it is of very general diffusion over this country during the cold season, being indeed much commoner than in Britain. The most abundant Lark, however, on the plains of Upper India and table-land of the Peninsula, is the *Chándul* or Crested Lark *(Galerida cristata)*, which is also a European species, but of rare occurrence in Britain; and the song and mode of delivery of it in the air of this bird, also, is not very unlike that of the Sky Lark, although it does not soar to so lofty an altitude.

The community of species among the birds inhabiting or visiting India and the British islands is most remarkable among the diurnal birds of prey, and (as might be expected) among the wading and swimming tribes; but as these are mostly rare in Britain, and do not fall much under common observation, their presence in India fails to convey any sort of reminiscence of home. The relentless persecution of it by gamekeepers has now very nearly extirpated, as a permanent inhabitant of Britain, that fine handsome bird, the common European Kite *(Milvus regalis)*; but were it as numerous in England now as in the days of the Tudors, the Scavenger Kites of India *(M. govinda)* might help to remind the British exile in this country of his distant home in the west. "In the days of King Henry VIII," writes Pennant, "as appears from the observations of the celebrated Clusius (l'Ecluse), the British metropolis itself swarmed with Kites, which were attracted by the various kinds of offal thrown into the streets, and were so fearless as to take their prey in the midst of the greatest crowds, it being forbidden to kill them." How well can this description be recognised in India, where the Kite proper to the country is so very numerous in its season about human habitations; hundreds circling in the air together, especially towards evening, all collected over one spot, though there be no refuse to entice them thither; or if some garbage be thrown out, their dexterity in clutching whatever they can seize, without alighting, affords a curious, however frequent, spectacle; a few will commonly alight and mingle among their fellow scavengers the Crows, while a crowd of others are circling and dashing over them, and stooping as they sweep by. Mr. Knapp, in his 'Journal of a Naturalist' (which we quote from memory), relates an instance of—if we remember rightly—as many as eleven Kites having been captured in Gloucestershire upon one tree, with their feet frozen to the branches; and the latter curious fact was less surprising to the late accomplished naturalist, Professor Macgillivray, than the circumstance of so many individuals of a *Falconidous* bird having been found together. What better commentary upon the rarity of the Kite in Britain in our day! Why the birds

ing cold weather, and remaining with us so abundantly whilst it continues. This bird, and the harsh chattering of a very common kind of Shrike *(Lanius superciliosus)* in our gardens, are regularly the earliest intimations that most of us receive of the coming change of season; but a Snipe *(Gallinago stenura)* precedes them, which, though few sportsmen discriminate it from the common British Snipe (which makes its appearance somewhat later), is nevertheless a different bird, at once distinguished by having a set of curious pin-feathers on each side of its tail, whereas the British Snipe (which is equally abundant with us) has a broad fan-shaped tail, as unlike that of the other as can well be. The pin-tailed is the common Snipe of the Malay countries; and is unknown in Europe, excepting as an exceedingly rare straggler from its proper habitat, the east. But the Snipe is unobserved save by the many who delight in exercising their skill in shooting it, or who wonder to see it so soon in the provision-bazar; and our little piebald friend the Water Wagtail, in its season, and the common Sparrow at all seasons, so abundant as to be overlooked and forgotten, are probably all that the European reader, unversed in the study of ornithology, will be able to recal to mind as yielding associations of home; unless, perchance, he may also recollect the common small Kingfisher of this country, which differs from the British bird only in its more diminutive size.

We have somewhere read of the delight expressed by one who had been many years in India, at seeing, upon his return to his native land, the Sky Lark rise from the sod at his feet, and mount higher and still higher, till reduced to a mere speck in the heavens, or utterly lost to view, all the while making the air ring with its music. Had he ventured forth into the fields of any part of India, he would have seen and heard the very same; although the species (*Alauda malabarica*) is different, and may be somewhat inferior to the European Sky Lark in song, so far at least as regards variety in the notes; but there is really very little difference, so little that the two birds could assuredly not be distinguished by the voice alone, nor by the mode of flight. Examined, the common Indian Lark may be described as resembling the European Wood Lark in size and shape, with the plumage of the Sky Lark. It may, indeed, be remarked that even the Pied Wagtails of India *(Motacilla luzoniensis* and *M. dukhunensis)* are specifically different from those of Europe *(M. alba* and *M. Yarrellii)*, however similar in appearance and habits; but the Grey Wagtail of Britain *(Calobates sulphurea)* is identically the same in India and Java, and we have seen a specimen contained in a collection from Australia (where, however, this species has not been observed by Mr. Gould, nor by any of his numerous co-adjutors in that country). We have seen this delicate little

bird, so clean and bright in its appearance, tripping about over one of the filthiest black drains in Calcutta; and it is of very general diffusion over this country during the cold season, being indeed much commoner than in Britain. The most abundant Lark, however, on the plains of Upper India and table-land of the Peninsula, is the *Chándul* or Crested Lark *(Galerida cristata)*, which is also a European species, but of rare occurrence in Britain; and the song and mode of delivery of it in the air of this bird, also, is not very unlike that of the Sky Lark, although it does not soar to so lofty an altitude.

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of this genus are eminently social, if not gregarious. How often do we see an old tree covered with them, or a number together upon a house-top, preening and sunning themselves, while others are sailing about above them! And so also with the British Kite where sufficiently numerous. In a list of the birds observed to winter in Macedonia, Captain Drummond remarks of it—"Most 'numerous, and seem fond of society, *as they roost in company;* 'upwards of fifty of these birds were seen one evening about sun-'set, sitting upon *one* tree, along with a *Circaëtus brachydactylus.*"*

The poet and scholar and "independent being in his day," John Milton, it may be remembered, considered that the contests of the petty monarchs of the Saxon heptarchy were about as worthy of historic record as "the combats of Kites and Crows;" for, in his time, no doubt, it was as common in England to see a Crow attack and pursue a Kite in the air, as it now is in India: but such a spectacle in Great Britain would, in these days, probably be recorded in the news-prints, as quite an unwonted phenomenon in Natural History; and far more surprising would be the descent of a Kite to clutch garbage in the populous streets of London, or even its appearance sailing and circling aloft, which most indubitably would find its record in print.

Every reader will or ought to be familiar with Macaulay's famous sketch of the physical condition of the country and its animal inhabitants in Great Britain, during the long middle ages, before so many creatures were extirpated, or reduced to extreme rarity, by the encroachments of cultivation and of increased population upon the wilds. Mr. Yarrell's history of the Crane, as a British bird (it is still common in Scandinavia), affords some further illustration; and an inhabitant of rural Britain, transferred in those days to this part of the world, would have recognised more British birds as common inhabitants of India, than now that the larger kinds have, for the most part, become so very rare and shy within the British islands.

Whatever may be the amount of British species of birds actually obtained, according to the list, in Lower Bengal for instance, there is nought in the *ensemble* of the various birds under daily observation in this country, to remind us of the present familiar ornithology of Great Britain. The newly-arrived observer from that region will particularly be struck with the number of birds of large size which he sees everywhere, even in the most densely populated neighbourhoods; flocks of Vultures, huge 'Adjutants' (in their season), swarms of Kites (in their season too, for they disappear during the rains),—and all three soaring and circling high in air as commonly as at rest,—Brahmini Kites, various

* Annals and Magazine of Natural History, XVIII, 11 (1846).

other birds of prey, among which four kinds of fishing Eagle (including the British Osprey) are not uncommon,—water-fowl in profusion in all suitable localities, Herons especially of various kinds very abundant,—several sorts of Kingfisher (mostly of bright hues), the common Indian Roller, also a bird of great beauty, and the little bright green Bee-eater (*Merops viridis*) conspicuous everywhere,—his impudence the common Crow of India, of unwonted familiarity and matchless audacity,—the different Mainas remarkable for their tameness, the Drongos or 'King Crows,' the *Sát-bhái*s (or 'seven brothers') with their discordant chattering, two sorts of melodiously chirruping Bulbuls, the bright yellow 'Mango-bird' or Black-headed Oriole, the pretty pied Dhyal* (the only tolerably common sylvan songster worthy of notice), the brilliant tiny Honey-suckers (also with musical voices), the lively and loud Golden-backed Woodpecker, and two monotonously toned species of Barbet, the pleasingly coloured Rufous Tree-magpie (*Dendrocitta rufa*), the noisy Cöel (remarkable for the dissimilarity of the sexes, and for parasitically laying in the Crows' nests), the Crested Cuckoos (*Oxylophus*) during the rainy season (parasitical upon the *Sát-bhái*s), with other *cuculine* birds, especially the Coucal or 'Crow-Pheasant' (another noisy and conspicuous bird wherever there is a little jungle); and last, but not least characteristic, in this most summary presentment of the birds commonly observed in Lower Bengal, the harmonious cooing of two or more kinds of Dove, soothing to repose and quiet, and the loud screaming of flocks of swift-flying green Parakeets, with sundry other types all strange to the new-comer:—while he misses the familiar types of home, the various Thrushes, Finches, Titmice, &c., which are feebly or not at all represented in the ordinarily observed ornithology of this part of the world: the bright little *Iora* may perhaps seem to represent the Titmice, and the tiny 'Tailor-bird' the Wren; while the northern forms of Finches are replaced by the *Báyas* or 'Weaver-birds' (with their curious pensile nests) and the diminutive thick-billed *Muniás*: but he will be much struck with the prevailing silence of the jungle, and the paucity of small birds even in the cold season, so different from the woods and gardens and hedge-rows of his native land, teeming with small feathered inhabitants, among which

* *Le Cadran* of Levaillant (*Oiseaux d' Afrique, t.* 109), who remarks—"Voici l'oiseau qu' Albin décrit sous le nom de *dial-bird* (oiseau cadran), que lui donnent aussi les habitans du Bengale, à ce qu'il dit, et que nous lui laisserons de même pour ne pas multiplier inutilement les noms, quoique cependant nous avouions ne pas connoitre le motif de cette dénomination singulière pour un oiseau; à moins qu'on ne l'attribue à ce que, chantant à certaines heures du jour, comme il le fait en effet, les peuples de cette partie du monde, ou l' espece se trouve aussi bien qu'en Afrique, ne soient instruits de l'heure qu'il est par le moment ou le mâle commence son chant; ce qui est assez ordinairement au lever et àu coucher du soleil"!!! The Dhyal is not African.

are so many pleasing songsters of all degrees of merit:* he will miss the Swallows, except occasionally and somewhat locally a few of the *Hirundo rustica*, chiefly over water, and young birds of the past season; and along the river-banks, where high enough, when the small Indian Bank Martin *(H. sinensis)* will occur abundantly; but the Swallows are replaced by two non-migratory Swifts, the common House Swift *(Cypselus affinis)* and the little Palm Swift *(C. balasiensis)*. Let him travel, and wherever the telegraph-wires extend he will see the Roller and the 'King Crow' habitually perching on them, to watch for their insect prey; the former displaying his gaily painted wings to advantage, as he whisks and flutters about, regardless of the fiercest sun; and he will soon make acquaintance with the small white Vulturine bird, *Neophron percnopterus*, the 'Rachamah' or 'Pharaoh's chicken,' introduced as British, because a single pair has been known to stray so far beyond its ordinary haunts.

Of the smaller British land-birds only few occur, and these are mostly rarities in the west; but the Wryneck is not uncommon, though little observed, and the European Cuckoo will now and then turn up, more frequently in the barred plumage of immaturity; the Hoopoe, too, is common, but is much too rare in England to awaken a reminiscence, and so with others. Of course we allude to the cold season, and to birds in their winter quarters. Among the Hawks, the Kestrel will occasionally be observed in extraordinary abundance; and Harriers *(Circus)* are often seen beating over the open ground: but the small waders are particularly common in all suitable places, including most of those found in Britain, in greater or less abundance. It would be tiresome to particularize further. But wonderful is the num-

* We here refer more especially to the British islands: for it is a common remark how comparatively rare the smaller birds are in France and Germany. There are several reasons for this: the principal of which is, probably, that the seasons being more strongly contrasted on the continent, birds are there migratory to a greater extent, and a larger proportion of them merely traverse the midland countries of Europe in the seasons of passage; the general absence of hedgerows may also be remembered; and the unrelenting persecution of little birds by gunners, in France especially, where Mr. Yarrell himself assured the writer of this note that he had seen a pointer trained to stand at Larks! Nor is this an uncommon occurrence, as we have been told. The following passage is quoted from a recent communication to the 'Zoologist' (for October 1856.) "I think," remarks the Rev. A. C. Smith, "that every Englishman who has travelled much on the continent will have been struck, not only with Mr. Bree, at the scarcity of birds in the Swiss mountains, but also generally through the whole of France, Belgium, Germany, and Italy. From the time he leaves England till his return, he may drive through the endless corn-districts of France, through the interminable plains of Bavaria, through the boundless solitudes of the black forest, even through the vineyards and gardens of Italy, and, comparing the result of his observations with what he sees daily in his own country, he will marvel at the paucity of specimens of the feathered race:" less so, however, in Switzerland, according to this writer; and less so, we likewise understand, in Scandinavia.

ber of fishers, and vast indeed must be the consumption of their finny prey. Otters *(Lutra nair)* among the mammalia, but no Seals; and of birds, sundry fishing Eagles, and a great bare-legged fishing Owl, with various Kingfishers in abundance, numerous kinds of Heron in surprising numbers, Pelicans, Darters *(Plotus)*, Pygmy Cormorants, and Grebes or 'Dabchicks;' besides Gulls, Terns, and rarely Skimmers *(Rhynchops)*. Gulls, however, are less numerous than in Britain; and we have met with three species only, the common British *Larus ridibundus* and a nearly affined species, with the fine *L. icthyäetus* chiefly towards the mouths of the Gangetic rivers. Over the salt-water lake near Calcutta, we have seen a very uniformly scattered flight of the great White Egret so prized at home, as far as the eye could reach in every direction, all pursuing one course to some favorite fishing-ground, and flying just above the reach of gunshot. The Gull-billed Tern is there one of the common birds, and the Whiskered Tern *(Hydrochelidon leucoparica)*, replacing the Black Tern of the Kentish marshes; and the Peregrine Falcon may not unfrequently be seen, well meriting the name of 'Duck Hawk' bestowed on it in North America: also great flocks of Longshanks *(Himantopus)* wading and seeking their subsistence in the expanse of shallow water. And yet we may pass for hours along the reed-fringed *nullahs* or water-courses in the immediate vicinity, and scarcely see a living thing or hear a sound in those watery solitudes; but the muddy banks are honeycombed with the footsteps of wild Pigs of all sizes, and various *Rallidæ* are swarming around, as the numbers of them captured in trap-cages abundantly testify. No sign whatever of the proximity of the great emporium of the east, within an hour's distance or less of its outskirts in a rude canoe; and human inhabitants, fowlers and fishermen or both combined, who have never seen Calcutta in their lives, and actually know not that they are living under the British Government! These men bring their captured produce to certain ghâts, and there sell to other people whose business it is to re-sell to the provision-bazar dealers. Of a number we once questioned, a few only had ever journeyed to Calcutta, and of them but one had seen the Government House!

Passing from the delta of Lower Bengal, no matter in what direction, a considerable replacement of species may be observed, characteristic of the fauna of Behar and of the plains of Upper India to the west and north, and of the Burmese countries eastward: but it is not our object to proceed to minute details; nor even to treat of the assemblage of forms in different regions of the sub-Himaláyas, where those of Europe and of W. and N. Asia prevail more and more towards the N. W., Malayan

forms eastward, and Chinese types and even species to a great extent (or, to express it more correctly, particular sub-Himaláyan genera and species, the range of which extends eastward to China.*) Again, on the highlands of the Peninsula of India, and still again in those of Ceylon, distinct species of the northern types occur, but *no different genera*. Thus the Jungle-fowl of N. India is replaced by a different species *(Gallus Sonneratii)* in the Peninsula, and by a third *(G. Stanleyi)* in Ceylon: and not a few similar instances might be adduced.

We will conclude this slight notice relative to Indian birds in particular, by quoting Dr. G. Buist's highly graphic sketch of a curious ornithological incident observed annually in the island of Bombay. "Two events," he remarks, "strike with surprise the ornithologist on the approach of the monsoon. Nearly all the Kites, Hawks, Vultures, and other carrion-birds disappear from the sea-coast, while the Crows begin to build their nests and hatch their young just at the season that seems most unsuitable for incubation, when the eggs are often shaken out, or the nests themselves are destroyed by the storm, and the poor birds are exposed, in the performance of their parental duties, to all the violence and inclemency of rain and tempest. At the instigation of a sure and unerring instinct, the carnivorous birds, as the rains approach, withdraw themselves from a climate unsuitable to the habits of their young, betaking themselves to the comparatively dry air of the Dukhun, where they nestle and bring forth in comfort, and find food and shelter for their little ones. * * * The scenes connected with this, which follow the conclusion of the rains, are curious enough. While the Mahommedans bury, and the Hindus burn their dead, the Parsees expose their dead in large cylindrical roofless structures, called TOWERS OF SILENCE, where birds of prey at all times find an abundant repast. Their family cares and anxieties over for the season, the carrion-birds, which had left in May for the Dukhun, return in October to Bombay, and make at once for the usual scene of their festivities, now stored with a three months' supply of untasted food. As they appear in clouds approaching from the mainland, the Crows, unwilling that their dominions should be invaded, hasten in flocks to meet them, and a battle ensues in the air, loud, fierce, and noisy; the fluttering of the wings, the screaming and cawing of the combatants, resounding over the island, till the larger birds succeed, and having gained the victory, are suffered henceforth to live in peace."†

In Bengal, the Kites and Brahmini Kites breed chiefly in January

* The curious on this subject may consult with advantage Mr. Hodgson's paper published in the 'Proceedings of the Zoological Society' for 1855, p. 124.

† 'Edinburgh New Philosophical Journal,' Vol. LVI, 337.

and February, and disappear during the rains. The adult 'Adjutants' make their appearance as soon as the rains set in, and becoming in fine plumage towards the close of the rains, depart at that time to breed in the eastern portion of the Sundarbáns upon lofty trees, and along the eastern coast of the Bay of Bengal upon trees and rocks. Vultures are permanently resident; and the Crows propagate chiefly in March and April, their nests being not unfrequently exposed to the fury of the nor-westers and destroyed by them altogether.*

It is only among winged animals that we observe a community of species in the *fauna* of India and of Great Britain; for, among the mammalia, several of the European Bats inhabit the sub-Himaláyan region, but no *quadruped* save the Stoat or Ermine, which is confined to the vicinity of the snowy ranges. The Brown and Black Rats may be presumed to have been introduced into both countries; but, strange as it may appear, we have never seen the *Mus musculus* from any part of India, it being replaced by a different species (the *M. Manei*), of similar habits, which, upon comparison of specimens, is seen to be as distinct from the common Mouse of Europe as the Brown Rat is from the Black Rat. Nevertheless, the European Mouse must necessarily have been often introduced from the shipping, although we have not chanced to observe it.† Of other qua-

* To those who indulge a taste for gardening, the Crows are an intolerable nuisance at this period. We allude to urban and suburban gardens. With creepers especially they commit sad havoc, breaking off not so much the young shoots, as the pliable older stems to construct their nests with. In pure mischief, too, how often have we watched them deliberately tearing the lovely flowers of the *Ipomœa rubro-cærulea*, one of the most shewy and conspicuous ornaments to our gardens during the cold weather, and scattering the fragments of them underneath!

We have just been assured, on authority beyond question, of the curious fact of two Crows' nests being found, entirely and very neatly constructed of the wires used for fastening down the corks of soda-water bottles! As it may well be wondered where such an accumulation of these could be procured, we may remark that Bengali servants are in the habit of treasuring them up till they amount to a saleable quantity; and that enormous heaps of them may accordingly be seen in the shops of some of those very respectable dealers in the Bow Bazar, whose proper avocation is, with similar shops in England, indirectly purported by the announcement—'Dealer in Marine Stores.' The supply of material, therefore, is comprehensible, however curious its application.

† That most hateful animal the Brown Rat *(Mus decumanus)* is nowhere a more intolerable nuisance than in and about Calcutta. The Black Rat (M. RATTUS) we have only seen from the shipping; and occasionally brown examples of it, which may be distinguished at a glance from the ordinary Brown Rat by those who know the two kinds. It appears to be the Black Rat (or old English Rat, as it is sometimes called), which has nearly or quite exterminated the small frugivorous native Rat of New Zealand (an animal that has never been scientifically described); as itself is believed to be almost extirpated in Britain by the Brown Rat. The habits of the two animals differ, however, to an extent that some think may sufficiently account for the present rarity in Britain of the Black Rat, which does not burrow in the ground like the other, but has its

drupeds, that bear the same popular name, the Wolf of Europe is not the Wolf of India; and the latter is emphatically an animal of the plains, while the former resorts chiefly to hill-forests,—the result in part, perhaps, of centuries of persecution: neither is the common Otter of India, nor any of the Otters of this country (so far as is known), identical with the European Otter; but in the museum of the Asiatic Society there is a specimen of an Otter from Algeria, which (externally at least) is undistinguishable from the common Otter of Bengal, that is so extensively tamed and *trained* along the course of the Brahmaputra, as Cormorants are also trained in China. The Fox of the Himaláya, however, makes a near approach to the European Fox, though considered to be of a different species. In the winged insect-world, there are numerous species common to the two regions: among the most prominent of which, appertaining to the *Lepidoptera*, are the cosmopolite *Cynthia cardui* (or 'Painted Lady' butterfly) at all elevations, the *Papilio machaon* (or English 'Swallow-tail' butterfly) in the Himaláya, the *Colias edusa* (or 'Clouded-yellow' butterfly) and the *Argynnis lathonia* (or 'Queen of Spain') also common in the Himaláya, *Sphinx convolvulus* at all elevations, &c.; but others are represented by nearly similar species, which are considered different upon comparison, as the 'Purple Emperor' (*Apatura*) and 'Common Sulphur' (*Gonepteryx*) butterflies, and others which are more obviously different, as *Vanessa vulcania* of the Himaláya compared with *V. atalanta* of Europe. Two species of 'Death's-head' Moths (*Acherontia*) are common to all habitable elevations; and one of these is exceedingly similar to that of England (*Ach. atropos*); but is nevertheless considered by the eminent entomologist Westwood to be distinct. Of marine animals there are also a few pelagic fishes, of which the large Hammer-headed Shark (*Sphyrna zygæna*) is a conspicuous example; but no fresh-water fish whatever. The proposition remains, that community of species in the *fauna* of Great Britain and that of India is all but confined to such as are endowed with the power of flight.

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abode upstairs in old-fashioned gable-roofs and the like; though it should still be found about farm-buildings, if the other did not prey upon it as commonly believed. According to Dieffenbach (whose excellent 'Travels in New Zealand' were published in 1843), "it is a favorite theme" (with the *Maori*) "to speculate on their own extermination by the Europeans, in the same manner as the English Rat has exterminated their indigenous Rat." In Catlin's work on the North American 'Indians' of the far west (Vol. I, p. 194), there is a curious account of the first appearance of the Brown Rat in the Missouri territory, and of its there making havoc with the indigenous 'Deer Mouse' (*Meriones.*) For this reason, it was welcomed and protected at first; but very soon become the same destructive pest among the 'wigwams,' that it everywhere else is.

The more immediate object of this essay, to which it is about time that we thought of adverting, is not to treat of the general zoology of India, nor even of its birds; but simply to furnish a sort of commentary on the meritorious popular work of Mr. Yarrell, in its bearings upon Indian ornithology. As will be shewn in the sequel, a very large proportion of the feathered inhabitants of the British islands are equally natives of—or seasonal or irregular visitants to—this country; and the statements of the late accomplished and much respected naturalist just referred to, with reference to the distribution of British birds in India, require the illustrations we are about to give, in order that the facts of the case should be apprehended.

It is not enough to state that such and such a bird "has been observed in India:" for the assertion applies equally to a species that may have been met with once or twice only, and is known to be of exceedingly rare occurrence in this extensive range of territory, and to species that are of the most abundant occurrence, oftentimes much more so than in Europe: and we observe not a few instances cited of birds having been obtained in the vicinity of Calcutta, upon authority no doubt admissible did it really exist, but which does not happen to exist, as we chance to have particular reasons to know.

For example, the Chough, or 'Cornish Chough' as it is often called (*Fregilus graculus*), an inhabitant of the more elevated regions of the Himaláya and of all high middle Asia, is stated to have been obtained "in the vicinity of Calcutta!" The Raven (*Corvus corax*), too, is asserted to have been "found near Calcutta." The Magpie (*Pica caudata*) to have been "found in India." The Starling (*Sturnus vulgaris*), "Calcutta;" *i. e.* caged birds no doubt, but brought from a considerable distance, as we surmise. The Nightingale has been "found in India:" yes, brought from Persia in a cage, viâ Afghânistán, and the species different from the British Nightingale! Various other instances might be adduced.

There are two principal sources of error leading to mistakes of this kind: firstly, the inaccurate determination of species, where different kinds very nearly resemble each other; and secondly, the vague misuse of names, which is probably the more fertile source of error of the two.

Thus, every large black Crow, in whatever region, is sure to be denominated "the Raven:" and hence the true Raven (*Corvus corax*) came to be considered as a bird of almost universal distribution. "It is one of those birds," writes Mr. Mudie (in his 'Feathered Tribes of the British Islands'), "which inhabit almost all latitudes, and have their plumage unchanged by varieties of seasons or of climate. Under the line and near the poles, in the

Northern Hemisphere, and in the Southern, under burning sun, and amid chilling cold, it is still the same dark, forbidding, and hoarsely croaking Raven." So much however, is more than can be conceded even of the genus *Corvus* in the aggregate; for it has no representative in all South America, nor in New Zealand and the numerous archipelagos of the Pacific, and there is one species only in Australia. Levaillant's Raven of South Africa, described by him as identical with that of Europe, has been sought in vain by subsequent observers in that region.* The true Raven is pre-eminently a bird of the coldest climates: though a few occur so far southward as in the Barbary States, in America so low as in the Carolinas, and in India proper within the Punjab only. "The Raven," remarks Sir John Ross, "is one of the few birds that are capable of braving the severity of an arctic winter." But the finest account of him is by Von Wrangell, in his most impressive description of the fearful cold of a Northern Siberian winter; when—"Even the Rein Deer seeks the forests to protect himself from its intensity: in the *tundras* [equivalent to the 'barren-grounds' of Arctic America], where there is no shelter to be found, the whole herd crowd together as closely as possible to gain a little warmth from each other, and may be seen standing in this way, quite motionless. Only the dark bird of winter, the Raven still cleaves the icy air with slow and heavy wing, leaving behind him a long line of thin vapour, marking the track of his solitary flight."† Such a bird is not likely, we might suppose, to inhabit the vicinity of Calcutta; and yet it is not safe to leap to conclusions. Not a few migratory species are common to the polar circle and to Lower Bengal, and even further towards the equator, according to season: but the individual birds may not migrate so far north and south. The climate of Britain being "insular," and less "excessive" than that of the European continent even further south, great numbers of Song Thrushes and other birds which are resident throughout the year in Britain, are known to arrive from the continent in autumn and depart in spring; and in France and Germany the same species are migratory to a far greater extent than in England, proceeding of course further southward to pass the winter. The *Calliope camtschatkensis* (a delicate little bird much like a Nightingale, but with a brilliant ruby-throat), which is not rare in the vicinity of Calcutta during the cold season, arrives "early in April, with the Snowfleck, in the Lower Kolyma district" in Northern Siberia (as we are told by Von Wrangell);‡ that is to

* *Comptes Rendus*, xxxvii, 830.

† Narrative of Expedition to the Polar Sea, Sabine's translation, p. 390.

‡ Ibid, p. 52.

say, before the last of them have left Bengal: but it is remarkable that we have never seen this bird in the very numerous collections from the Himaláya examined hitherto; though another and non-migratory species of the same genus (*C. pectoralis*), peculiar so far as known to the Himaláya, is of common occurrence in such collections. It is, however, enumerated in Mr. Hodgson's list of the birds of Nepal: still it seems to follow that the *C. camtschatkensis* does not breed extensively on this side of the snow; although our Bengal birds may not have to find their way quite so far as to Northern Siberia to pass the summer. The Hoopoe (*Upupa epops*), another species common in Lower Bengal during the cold season, is, to all appearance, a bird of fluttering and feeble flight; but has repeatedly been observed, during the seasons of migration, at altitudes considerably above the limits of vegetation. "On the western side of the Lánák pass, about 16,500 feet, I saw a Hoopoe," writes Major Cunningham;* and at Momay (14,000 to 15,000 feet elevation), under the lofty Donkia pass in Northern Sikhim, Dr. J. D. Hooker observed, in the month of September, that—"Birds flock to the grass about Momay; Larks, Finches, Warblers, abundance of Sparrows† (feeding on the Yak droppings), with occasionally the Hoopoe-waders, Cormorants, and wild Ducks, were sometimes seen in the streams, but most of these were migrating south":—and the late Bishop of Norwich (Dr. Stanley) has recorded that a Hoopoe "approached a vessel in the middle of the Atlantic, and kept company with it a good way, but did not settle on board, which it probably would have done had it been tired."

While on this subject, a more surprising instance of endurance can hardly be cited, than that of the feeble tiny Goldcrests (*Regulus cristatus*) crossing the German Ocean in multitudes, to pass the winter in the milder climate of England. "On our eastern coast," remarks Mr. Yarrell, "at the end of autumn, this species occasionally arrives in flocks. Mr. Williamson of Scarborough has observed this on the coast of Yorkshire; and Mr. Selby has recorded that on the 24th and 25th of October, 1822, after a very severe gale, with thick fog from the north-east, but veering towards the conclusion to the east and south of east, thousands of these birds were seen to arrive upon the sea-shore and sand-banks upon the Northumbrian coast; many of them so fatigued by the length of their flight, or perhaps by the unfavorable shift of wind, as to be unable to rise again from the ground, and great numbers must have been caught or destroyed. This flight must have been immense in quantity, as its extent

* 'Ladák,' &c. p. 205: *i. e.* nearly 1,000 ft. higher than the summit of Mont Blanc!

† The only Sparrow which we have seen from Sikhim is the *Passer montanus*.

was traced along the whole line of the coasts of Northumberland and Durham!" Multitudes of them doubtless perished in the waves; and the writer of this article has known instances of their alighting in considerable numbers upon the yards and rigging of small coasting vessels.

In an unpretending work, entitled 'a Familiar History of the Nature, Habits, and Instincts of Birds,' by the Rev. E. Stanley (afterwards Bishop of Norwich), in the account of the Meadow Pipit (*Anthus pratensis*), the following passage occurs:—"But a 'still more extraordinary instance, both as regards distance from 'land and situation, is that of a common Titlark having alighted 'on board a vessel from Liverpool, in latitude 47° 4′ south, longi-'tude 13° 19′ east, at a distance of at least thirteen hundred miles 'from the nearest mainland of South America, and about nine 'hundred from the wild and barren island of Georgia. The poor 'little traveller was taken and brought to Liverpool, where it was 'seen by Dr. Traill, one of our most eminent naturalists." This passage is quoted in Mr. Yarrell's second edition, but is expunged from his third. The fact being, as we learn from the 'Zoology of the Voyage of the Beagle,' that the species was no doubt erroneously identified with the European *A. pratensis*; being far more probably of the nearly affined species, *A. correndera*, which inhabits La Plata, Chili, and the Falkland Islands; and Mr. Darwin was informed, by an intelligent sealer, that it is the only land-bird in Georgia and South Orkney (lat. 61° S.): "it has, therefore," he adds, "probably a further range southward than any other land-bird of the Southern Hemisphere." Still the capture of a specimen so many hundred miles from the nearest land is worthy as ever of citation, as a most surprising occurrence.

When such journeys are known to be performed by creatures so feeble to all appearance as the diminutive Golderest, which on land is seldom observed to flit a distance of many yards, we are the less surprised to learn of the wondrous feats achieved by birds of powerful wing, the 'Passenger Pigeon' of America for example; of which the accompanying often cited instance may nevertheless be quoted from Audubon's 'Ornithological Biography.' "Their great power of wing enables them to survey 'and pass over an astonishing extent of country, in a very short 'time. Thus, Pigeons have been killed in the neighbourhood of 'New York, with their crops full of rice, which they must have 'collected in the fields of Georgia and Carolina, those districts 'being the nearest in which they could possibly have procured a 'supply of such food. As their power of digestion is so great, 'that they will decompose food entirely in twelve hours, they 'must, in this case, have travelled between three and four hundred 'miles in six hours, which shews their speed to be, at an average,

'about one mile in a minute. A velocity such as this would 'enable one of these birds, were it so inclined, to visit the 'European continent in less than three days."

In the preface to Mr. Yarrell's third edition, now under review, the following truly astonishing fact is recorded, in the words of Sir John Richardson, the well known eminent naturalist and enterprising arctic voyager, and companion formerly of Sir John Franklin. "With respect to Sir John Ross's Pigeons, as far as I can re-'collect, he despatched a young pair on the 6th or 7th of October, '1850, from Assistance Bay, a little to the west of Wellington 'Sound; and on the 13th of October, a Pigeon made its ap-'pearance at the dove-cot in Ayrshire, from whence Sir John had 'the two pairs of Pigeons which he took out. The distance 'direct between the two places is about 2,000 miles. The dove-'cot was under repair at this time, and the Pigeons belonging 'to it had been removed; but the servants of the house were 'struck with the appearance and motions of the stranger. After 'a short stay it went to the pigeon-house of a neighbouring 'proprietor, where it was caught, and sent back to the lady who 'originally owned it. She at once recognised it as one of those 'which she had given to Sir John Ross: but, to put the matter 'to the test, it was carried into the pigeon-house, when out of 'many niches it directly went to the one in which it had been 'hatched. No doubt remained in the mind of the lady of the 'identity of the bird."

"By what extraordinary power," remarks Mr. Yarrell, "did 'this interesting bird find its way; and by what route did it 'come?" Remembrance of objects seen will surely not suffice in crossing so vast an expanse of ocean. We will revert to this subject presently. There are, however, also instances of land-birds having been observed to wing their way across the breadth of the Atlantic! The late M. Audubon told Mr. Yarrell (as he likewise assured the writer who now cites him) that "on one of 'his voyages between this country" (Britain) "and America, 'and when 300 miles from the west coast of Ireland, he saw a 'Peregrine Falcon pass over the vessel in rapid and vigorous 'flight; the direction pursued being on a line to the Azores."

Again, "the Owls, though some of them only are migratory, 'from the lightness of their bodies and the large expanse of 'their wings, appear to fly without much labour. The nephew of 'Dr. Jenner, when on board a vessel going in a direct course for 'Newfoundland, and more than 100 leagues from any land, saw 'a Brown Owl gliding over the ocean with as much apparent 'ease as when seeking for a mouse over its own native fields."

"The late William Thompson of Belfast," continues Mr. Yarrell, in his 'Natural History of Ireland' (Vol. 1, p. 102,)

"records, from the log-book kept on board the 'John and Robert' of 500 tons, Captain M'Kechnie, from Quebec to the port of Belfast, that from thirty to forty Snowy Owls were seen on the 16th of November, 1838, when the vessel was 250 miles from the Straits of Belleisle. Several followed the ship: from fifty to sixty were seen on the 18th, some alighting on the rigging and yards; three were caught and taken to Belfast alive: the last of those seen at sea was on the 20th November, the vessel then being near 700 miles from Belleisle, and sailing along in lat. 54°, or nearly so. The ship arrived at Belfast early in December; but had been driven out of her course in the commencement of the voyage by contrary winds."

As many as twenty-six species, which can only be considered as stragglers from America, are included in the third edition of Mr. Yarrell's 'History of British Birds.' Of these, two belong to the *Raptorial* order, viz., *Nauclerus furcatus* and *Strix* (*Scops*) *asio*; five are *Insessorial*, viz., *Loxia leucoptera*, *Agelaius phœniceus* (*!*), *Coccyzus americanus*, *Ceryle alcyon* (*!*), and *Progne purpurea*; one Pigeon, *Ectopistes migratorius*; ten waders, viz. *Botaurus lentiginosus*, *Numenius borealis*, *Totanus Bartrami*, *T. flavipes*, *T. macularius*,* *Macrorhamphus griseus*, *Tringa rufescens*, *Tr. pusilla*, *Tr. Schinzii*, and *Tr. pectoralis*; and eight *Natatorial*, viz. *Anser canadensis*, *Anas* (*Mareca*) *americana*, *Oidemia perspicillata*, *Fuligula mariloides*, *Clangula albeola*, *Mergus cucullatus*, *Larus Bonapartii*, and *L. atricilla*.† Of numerous species of birds that are common to Europe and America, a large proportion are equally abundant throughout the circuit of northern regions; others are commoner in America than in Europe, and *vice versâ*; and of course every proportion exists, until the decision becomes arbitrary whether a species is to be regarded as a mere straggler on either side, or otherwise. Thus the *Oidemia*, *Clangula*, *Mergus*, and one or two others, ought rather perhaps to be considered as species regularly inhabiting both sides of the Atlantic, however rare on the European side. Most, if not all, of them are birds which attain to high northern latitudes, and especially visit Greenland during the summer, a meridian from which they are liable to be wafted out of their regular course of migration. The common Wheatear is an English (and also Indian) bird which visits Greenland in summer; and, though unknown in the United States, it has been killed in the Bermudas: so also has the British Sky Lark, and the Corn Crake or Land-rail (*Crex pratensis*).

* M. Malherbe records the occurrence of an example of this common American bird in Algeria.

† To the above may be added *Ortyx virginiana*, as an introduced species.

But to return to India. Dr. J. D. Hooker's sketch of the grand but most desolate panorama beheld by him from the summit of the Donkia Pass (18,466 feet elevation) ought to be familiar to the recollection of most readers; and he elsewhere remarks that—"No village or house is seen throughout the extensive area over which the eye roams from Bhomtso, and the general character of the desolate landscape was similar to that which I have described as seen from Donkia pass. The Kiang grazing with its foal on the sloping downs, the Hare bounding over the stony soil, the Antelope* scouring the sandy flats, and the Fox stealing along to his burrow, all are desert and Tartarian types of the animal creation. The shrill whistle of the Marmot alone breaks the silence of the scene, recalling the snows of Lapland to the mind;† while the Kite and Raven wheel through the air, with as steady a pinion as if that elevation possessed the same power of resistance that it does at the level of the sea. Still higher in the heavens, long black V-shaped trains of wild Geese cleave the air, shooting over the glacier-crowned top of Kinchinjhow, and winging their flight in one day, perhaps, from the Yaru to the Ganges, over 500 miles of space, and through 22,000 feet of elevation: one plant alone, a yellow lichen (*Borrera*) is found at this height, and that only as a visitor; for, Tartar-like, it migrates over the lofty slopes and ridges, blown about by the violent winds. I found a small beetle at the very top, probably blown up also; for it was a flower-feeder, and seemed benumbed with cold."‡

The astonishing elevation at which the giant Condor sails above the Andes, as described by Alexander Von Humboldt and other observers, will doubtless recur to the memory of many readers.

"An enormous quantity of water-fowl," remarks the same scientific traveller, Dr. Hooker, "breed in Tibet, including many Indian species that migrate no further north. The natives collect their eggs for the markets of Jigatzi, Giantchi, and Llassa, along the banks of the Yaru river, Ramchoo, and Yarbru and Dachen lakes. Amongst other birds, the *Sáras*, or giant Crane of India (see Turner's Tibet, p. 212) repairs to these enormous elevations to breed. The fact of birds characteristic of the tropics dwelling for months in such climates is a very instructive one, and should be borne in mind in our speculations on the climate supposed to be indicated by the imbedded bones of birds." We may remark that the *Sáras* (*Grus antigone*) also breeds south of the Himaláya;

* The *Tchiru* and also the *Goa* (*Procapra picticaudata* of Hodgson.)

† We are unaware of the existence of Marmots in Lapland!

‡ MM. Huc and Gabet must have seen much of this kind of scenery, sublime in the overwhelming grandeur of its dreariness,

and that specimens too young to fly are occasionally brought for sale even to Calcutta.*

Again, Major Cunningham, in his 'Ladák,' &c., remarks that "the water-fowl swarm on the lakes and on the still waters of the Upper Indus. I have shot the wild Goose on the Thogji, Chanmo, and Chomoriri lakes at 15,000 feet; and Col. Bates and I shot three Teal on the Suraj Dal, a small lake at the head of the Bhága river, at an elevation of upwards of 16,000 feet:" but the time of the year is not mentioned by this author.†

Those birds which are common to India and the polar circle appertain for the most part, as might be supposed, to the wading and web-footed orders; and a few of them are of very general distribution over the world, as especially the common Turnstone (*Strepsilas interpres*), which seems to be found on every sea-coast. The *Lobipes hyperboreus* is a little arctic bird, of rare occurrence even in the north of Scotland, Orkney and Shetland: but a specimen was not long ago procured near Madras (!) which is now in the Calcutta museum;‡ and there also may be seen an example of the nearly related *Phalaropus fulicarius*, obtained so late in the year as May 11, 1846, in the

* Turner, describing the lake "Ramtchieu," remarks,—"This lake is frequented by great abundance of water-fowl, wild-geese, ducks, teal, and storks, which, on the approach of winter, take their flight to milder regions. Prodigious numbers of saurasses, the largest species of the crane kind, are seen here at certain seasons of the year, and they say, that any quantity of eggs may there be collected: they are found deposited near the banks.

"I had several of them given to me when I was at Tassisudon, during the rains; they were as large as a turkey's egg, and I remember being told that they came from this place; but whether or not they were those of the Sauras, I cannot venture to pronounce."

We have known instances of the *Sáras* breeding in captivity, when a pair is allowed the range of a large walled garden (protected from Jackals) containing shallow inundated enclosures for the growth of rice: in these the nest is commenced under water, and raised for some inches above the surface; and the eggs are two in number, about 3¾ inches long by 2½ inches broad, of a bluish-white, with a few distantly placed rufous specks and blotches.

The nest of the European Crane (*Grus cinerea*), also a common Indian bird, is thus described by Major Lloyd, as observed by himself in Scandinavia, "It 'usually breeds in extended morasses, far away from the haunts of men. 'It makes its nest, consisting of stalks of plants and the like, on a tussock, and 'often amongst willow and other bushes. The female lays two eggs," &c.

† The reader, curious on the subject of the migration of Indian birds, should consult a paper by B. H. Hodgson, Esq., in the 18th volume of the Asiatic 'Researches,' Part II., 122.

‡ A pair of these birds were obtained in Bermuda in the spring of 1848. "The male was found dead, floating in Riddle's Bay, on the 18th March, and had probably struck the lantern of the iron light-house (which is immediately above) during its nocturnal flight from the southward. The female, in ruddy plumage, was found *swimming* at the head of Hamilton Water, where it was killed on the 22nd March, by a blow from a stick." (Lieut. Wedderburn, in Sir W. Jardine's *Contributions to Ornithology.*) The Prince of Canino also records the occurrence of this species in Nicarágua.

Calcutta provision-bazar: it was wretchedly thin, but in clean winter plumage, the seasonal change of colour having not even commenced. The well-known naturalist of the Madras Presidency, Dr. T. C. Jerdon, obtained in Southern India a single example of a little Australian Plover, *Hiaticula nigrifrons*, which figures in his catalogue as a supposed new species by the synonyme *H. russata*. No doubt other such stragglers occur, not very unfrequently; but are little noticed here from the paucity of observers: whereas, in Britain, thanks to the popularity of such books as that especially under review, the number of qualified observers is proportionally far greater, and any uncommon bird exposed for sale at a poulterer's shop, or observed alive and at liberty, is tolerably sure of being correctly identified and duly recorded.

With reference to Sir John Ross's Pigeon finding its way back to its home in Scotland from the Arctic regions, the very great number of well-authenticated instances on record should be borne in mind of Dogs, Cats, Horses, Cattle, &c., in like manner returning to their homes from prodigious distances; and oftentimes by a direct route, instead of the circuitous route by which they had been driven or carried away. There is Mr. Jesse's anecdote of the *lame* Turtle (deprived of one of its flippers, and indelibly marked as usual with the hot iron upon its under-shell), cast sick into the British Channel, and being found three years afterwards again upon Ascension Island, where it had been first taken. The phenomenon of Bees, too, returning to their hives from enormous distances; and the well-ascertained fact of small migratory land-birds returning, year after year, to the place of their nativity; although they are known to migrate by night, traversing seas and continents and passing over the loftiest mountain chains!* Memory of objects seen and noted

* In former times, it was a current belief that Swallows did not migrate, but *hybernated*, and that *under water!* As if the protracted immersion alone would not have ruined their feathers, which happen to be renewed during the period of absence of these birds from their breeding-haunts. Of the many little *short-winged* birds that leave Europe for a warmer clime in winter, nobody seems to have thought about *their* hybernating; but only the *long-winged* Swallows! Well, the experiment was tried of fastening threads tinted with water-colours to the legs of a number of Swallows, with a view to ascertain if such colours would be soaked out during the disappearance of the birds. The latter returned, sure enough, with the coloured threads in due preservation; but the fact was established of the same individuals having returned from their migration! Abundant other evidence exists, however, for this remarkable fact. It is well known that the Nightingale, reared from the nest, never acquires its proper song, but warbles forth a strange and inferior medley of whatever it may have heard and picked up: a bird of this sort was reared by Mr. Sweet, a well-known writer upon singing birds, who turned it loose into his garden; there it remained until the season for migration, when it disappeared; but the next season it was back again, tame as ever, and at once distinguished by its peculiar song-notes.

will surely not suffice in these cases. Nay, the same mysterious faculty has even been asserted in the case of human beings in the savage state; as by Captain J. Lort Stokes, a scientific officer, who commanded the 'Beagle' in her last surveying voyage (1837-43) on the coasts of Australia. His statement, which we quote for whatever it may be considered as worth, relates to a native of New Holland, who accompanied him for a long while, by sea and by land. "Mungo," he tells us, "had a decided and 'most inexplicable advantage over all on board, and that in a mat-'ter especially relating to the science of navigation. He could 'indicate at once and directly the exact direction of our wished for 'harbour, when neither sun nor stars were shining to assist him. 'He was tried frequently, and under very varying circumstances; 'but, strange as it may seem, he was invariably right. This 'faculty, though somewhat analogous to one I have heard 'ascribed to the natives of North America, had very much 'surprised me when exercised on shore; but at sea, out of sight 'of land, it seemed beyond belief, as assuredly it is beyond expla-'nation."—*Narrative of Voyage, I.* 222.

Mais revenons a nos Corbeaux. In a catalogue of the birds procured in the course of the expedition into Asám in 1838, published in the 'Proceedings of the Zoological Society' for the following year, we read that "the Raven, the Carrion Crow, and the Rook, are inhabitants of Asám, but are seldom found in the depths of the forests. They rather follow the footsteps of man, and establish themselves in small numbers in the vicinity of villages and such places on the banks of rivers as are frequented by travellers as halting places. The Hooded Crow is very common, but I did not perceive any thing peculiar about it," remarks the writer, "to induce me to add it to my collection."

The foregoing paragraph is tolerably circumstantial: but will it be believed, that not one of the four British species mentioned inhabits the province, or is at all likely to be found in it! The Tibetan Raven (considered as a peculiar species by Mr. Hodgson, an opinion to which the Prince of Canino seems to incline, but which we still suspect remains to be tested by far more satisfactory evidence than at present,) may be presumed to inhabit the lofty mountains of Butan to the north, but assuredly not the

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The Hon'ble and Rev. W. Herbert reared a nest of young Willow-wrens, and having more than he wanted of them, turned one loose into his garden, where it stayed for the remaining weeks of the season, occasionally entering the house to feed with its fellow-nestlings; it then disappeared, with the rest of its species; but in the following spring was again tapping at Mr. Herbert's window to be let in! We have heard of other cases, equally conclusive; among the rest, that of a *lame* Redstart which returned for eleven years to the same garden!

valley of Asám: and the Hooded Crow referred to is no other than our Calcutta noisy friend, known in systems as the *C. splendens;* while the common black Crow of all India, *C. culminatus,* would seem to stand here alike for the 'Raven,' the 'Carrion Crow,' and the 'Rook!' Naturalists at home may well be pardoned for being led astray by such utterly reckless mis-statements. The true Rook (*Corvus frugilegus*) however, is known to inhabit or visit the Pesháwur valley, Afghânistán, and Kashmir (the Rook of China and Japan being considered a distinct species, *C. pastinator* of Gould;) and the Jackdaw (*C. monedula*) accompanies it in those countries, while the true northern Raven is met with not only there, but also over a great portion of the Punjáb. In other parts of India the comparatively small *C. culminatus* is popularly known to Europeans as "the Raven:" but the northern Raven would make a meal of one and not feel much the worse for it! For that matter, quoth the Scottish proverb, "Hawks dinna pick Hawks' een!" Be not so sure of that, if we may be indulged in another curious digression. Nay, if we mistake not, the British Raven is accused of plundering rookeries of the helpless callow broods; and would doubtless pounce upon a disabled Crow without mercy, as even the Lion and the Tiger have been known to kill and devour their wounded comrades.

Dr. Francis Buchanan Hamilton, remarking upon the hawking or falconry observed by him in the Sháhabád district, mentions that "the only pursuit worth notice that I saw in several days' hawking was from a large bird of prey named *Jimach,* which attacked a very strong Falcon as it was hovering over a bush into which it had driven a Partridge. The moment the Falcon spied the Jimach it gave a scream, and flew off with the utmost velocity, while the Jimach equally pursued. They were instantly followed by the whole party, foot, horse, and elephants, perhaps 200 persons, shouting and firing with all their might; and the Falcon was saved, but not without severe wounds, the Jimach having struck her to the ground; but a horseman came up in time to prevent her from being devoured."*

The *Wokháb* or *Ukáb,* as it is also termed, is a small Eagle, very abundant in the plains of Upper India, the Dukhun, &c., bearing many systematic names, the earliest of which is *Aquila fulvescens;* for it is a different bird, not quite so large and robust, as the *Aq. nævioides* of Africa, with which it has been supposed identical. The Hon'ble Walter Elliot, of the Madras C. S., remarks of it—"The *Wokháb* is very troublesome in hawking, after the sun becomes hot, mistaking the *jesses* for some kind of

* Montgomery Martin's compilation from the Buchanan Hamilton MSS., Vol. I., 505.

prey, and pouncing on the Falcon to seize it. I have once or twice nearly lost 'Sháhins' (*Falco peregrinator*) in consequence, they flying to great distances for fear of the *Wokháb*,"* *i. e.* the Jimach.

Dr. Austen H. Layard relates the same story, in his second publication—"Discoveries in the Ruins of Nineveh and Babylon," &c. (p. 298.) His friend Suttum, he writes, "came with us, carrying his Hawk, Hattáb, on his wrist.

"The plain, like all the country watered by the Khábour, was one vast meadow teeming with flowers. Game abounded, and the Falcon soon flew towards a Bustard, which his piercing eye had seen lurking in the long grass. The sun was high in the heaven, and already soaring in the sky was the enemy of the trained Hawk, the "Agáb," a kind of Kite or Eagle, whose name, signifying 'butcher,' denotes his bloody propensities.† Although far beyond our ken, he soon saw Hattáb, and darted upon him in one swoop. The affrighted Falcon immediately turned from his quarry, and with shrill cries of distress flew towards us.

"After circling round, unable from fear to alight, he turned towards the desert, still followed by his relentless enemy. In vain his master followed as long as his mare could carry him, waved the lure, and called the Hawk by his name; he saw him no more. Whether the noble bird escaped, or fell a victim to the 'butcher,' we never knew.

"Suttum was inconsolable at his loss. He wept when he returned without his Falcon on his wrist, and for days he would suddenly exclaim 'O Bej! Billah! Hattáb was not a bird, but my brother!' He was one of the best trained Hawks I ever saw among the Bedouins, and was of some substantial value to his owner, as he would daily catch six or seven Bustards, except during the hottest part of summer, when the Falcon is unable to hunt."†

The exciting sport of falconry, it may here be remarked, in which the higher classes of the West so much indulged of yore, is doubtless of oriental origin; though at what period, during the Roman domination, it was introduced among the Teutonic nations, is not so clear. Julius Firmicus, who died in the middle of the fourth century, is said to be the first Latin writer who speaks of falconers and the art of teaching one species of bird to fly at and catch another. The garniture of the trained Hawks cannot be traced in Europe prior to the crusades: in the famous Bayeux tapestry, for instance, these birds

* 'Madras Journal of Literature and Science,' X., 68.

† "Easterns never hawk, if they can avoid it, when the sun is high, as the bird of prey described in the text then appears in search of food." (Layard.)

are represented as being carried on the wrist unhooded. The principal species employed are identical in the two regions; namely, the *Bauri* of India, which is the Peregrine Falcon of the West; and the *Báz* of India, which is the Goshawk or 'Gentil Falcon' of Britain. In a curious Persian treatise on the subject, by the head falconer of the Mogul Emperor Akbar, the various species used are enumerated, and may be recognised with precision: among them is the *Shangar*, which is clearly the Jer Falcon of the north; represented as extremely rare and valuable, taken perhaps once or twice only in a century, and then generally in the Punjab. The *Sháhin* (*Falco peregrinator*), another favorite Indian Falcon, does not inhabit Europe, but is clearly the *Falco ruber indicus* of Aldrovand, rather than the small hobby-like Indian species (*F. severus*), on which Temminck bestowed the name *F. Aldrovandi*. With five or six exceptions only, the whole of the European diurnal birds of prey are met with in India, many of them being much commoner in this country; and they are associated with numerous other species unknown in Europe. The sport of falconry is widely diffused over Asia, even to the Malays; but whether extending to China and Japan, we are unaware.

It may further be noticed that the "quarry" hawked by Dr. Layard's Bedouin companions on the great plain of Mesopotamia, and rightly enough denominated by him a "Bustard," is no other than the Houbara *(Houbara Macqueenii)* of Sindh and Afghânistán; being a different species from that of Spain and North Africa *(H. undulata;)* and it appears that the former has most unexpectedly turned up, of late years, in England and Belgium, if not also in Denmark,—a single stray individual in each country! Accordingly, it is figured and described in Mr. Yarrell's 'History of British Birds,' with other stragglers as little properly appertaining to the British fauna,—among them an African Bulbul (*Pycnonotus aurivenler*), the 'Col d'or' of Levaillant, upon the authority of one undoubted occurrence of this bird, and the only instance known of its having been observed in Europe. Mr. Yarrell's object was to figure and describe every species which had found its way to the country, unaided by man; for, of course, any that had thus made its appearance once might do so again: and he also represents such introduced species as seem to have fairly gone wild, as the Pheasant, two kinds of Red-legged Partridge, and even the Virginian Colin (*Ortyx virginiana.*) Upon this principle, the list of British birds is likely to increase indefinitely, especially now that such pains are taken and expense incurred to introduce exotic game birds and water-fowl into the country.

But why, when the Asiatic Houbara is admitted, certain other

birds (which seem to have an equal or even better claim) have been rejected, in Mr. Yarrell's third edition, remains to be explained. For example, the handsome Bimaculated Duck (*Anas bimaculata*); the more especially, as besides the instances of its occurrence given in the text, we read, in the preface to the second edition, that "during the month of January last, 1843, Mr. Bartlett met with a specimen of this very rare Duck in the London market, which I have had several opportunities of examining," said Mr. Yarrell. Again, we have been assured that an example of the great spiny-tailed Swift of the Himaláya (*Acanthylis nudipes* of Hodgson) was obtained, a few seasons back, in England "in the flesh." Mr. Gould identifies this British-killed bird with his *Ac. caudacuta* of Australia; and remarks (in the preface to his grand work on the birds of Australia) that "I have alluded to the great wing-powers of the birds of the genus *Acanthylis*; in confirmation of which I may mention that an individual of this species was killed in England during the past year (1847.) It would be interesting to know," continues Mr. Gould, "the route pursued by the bird in travelling so great a distance as it must have done." Nothing very extraordinary, if identical with the Himaláyan species; and assuredly we can detect no difference upon comparing Himaláyan specimens with Mr. Gould's plate. Moreover, it is remarkable that whilst the great Alpine Swift (*Cypselus melba*) is common to the Himaláya, the Nilgiris, and high mountains of Ceylon, the great *Acanthylis* of the Himaláya has never been observed in S. India, but is replaced in the Nilgiris, Ceylon, and also across the Bay of Bengal, (in Penang, &c.) by a distinct species, the *Ac. gigantea*.

Unless we have been misinformed, both Gold and Silver Pheasants were turned out, many years ago, in the park at Clermont; and have thriven and multiplied much faster under such circumstances, than when every care has been taken with them in confinement. Both species, it is well known, are inhabitants of China; but it is less known that the Golden Pheasant, according to M. Temminck, inhabits not only China and Japan, but the northern parts of Greece, as also Georgia and the Caucasus; and it has been met with even in the province of Orenbourg. M. Degland informs us, that M. Gamba, French Consul at Tiflis, met with this gorgeous bird in numerous flocks on the spurs of the Caucasus which extend towards the Caspian sea; and that now it has gone wild and multiplied in some of the forests of Germany. In the opinion of Baron Cuvier, the ancient descriptions of the 'Phœnix' were founded on some vague idea or tradition of the Golden Pheasant; which seemed unlikely so long as this gaudily coloured bird was known only as an inhabitant of the extreme East; though now we may well suppose that it had

occurred, as an excessive rarity, to the early Greeks, and that it has subsequently increased and multiplied in regions which were more or less known to them. No notice is taken of the *Acanthylis* in Mr. Yarrell's work: and quite recently we find that a dead Pelican was found upon the coast of Durham; though such a bird might have escaped from captivity.*

As regards the Bulbul, which he inserts, as before noticed, it is classed by him as a Thrush (*Turdus;*) while his 'Rock Thrush' (*Orocetes saxatilis* of modern nomenclature,) a bird truly appertaining to the group of Thrushes, is referred by him to a separate genus (*Petrocincla.*) The Bulbul has no sort of claim to be thus classified; for it belongs to quite a different natural family, comprising very numerous species and many generic divisions, all of which are peculiar to Africa and Southern Asia and its archipelago. These birds are familiarly known as 'Bulbuls' in India; but must not be confounded with the Persian Bulbul, which is a species of true Nightingale (*Luscinia,*) a genus very closely related to some of the small Thrushes of America. We have no true Nightingale wild in India; but the 'Shâma' (*Cercotrichas macrourus,*) undoubtedly the finest songbird of this part of the world,† is not unfrequently designated the Indian Nightingale, a misnomer which only leads to confusion. Thus Dr. J. D. Hooker, in his most interesting work on the Sikhim Himaláya, twice notices "the Nightingale," as having been heard by him; but at a time of the year at which no real Nightingale ever sings. Every one familiar with the true Nightingale knows that it regularly ceases to sing, somewhat abruptly, about the beginning of the month of June, and this alike whether it has young to tend in the wild state, or when confined in a cage; and captive Nightingales recommence their song, if in health and vigour, about January, and continue in full song for two months or more before their wild brethren arrive from their southern haunts. This bird never sings out of season. Accordingly, we have no hesitation in declaring that Dr. Hooker's "Nightingale" refers to some other bird, and most probably to the Shâma. "On the 4th October," he remarks, "I heard the Nightingale for the first time in the season;" and when at Pemiongchi (a former capital of Sikhim), in January, he notices that "Nightingales warble deliciously night and morning, which rather surprised us, as the minimum thermo-

* 'Zoologist.' Nov. 1856, p. 5321.

† It is common to India and the Malay countries; and there is a second species (*C. luzoniensis*) in the Philippines, and a third (*C. erythropterus*) in Africa. We may remark that the *Orocetes cinclochyncha* is also termed *Shâma* in the Madras Presidency. Our esteemed Indian songster is *le Merle tricolor de longue queue* of Levaillant (*Oiseaux d'Afrique*, pl. 114).

meter fell to 28°, and the ground next day was covered with hoar frost. These birds migrate hither in October and November, lingering in the Himaláyan valleys till the cold of early spring drives them further south, to the plains of India, whence they return north in March and April." Among the numerous collections of Sikhim birds which we have examined, no specimen of a Nightingale has ever occurred: nor is the bird enumerated in Mr. Hodgson's lists of the species inhabiting that region. Yet Mr. Yarrell would surely have been justified in citing the high authority of Dr. J. D. Hooker, for assigning Sikhim as a *habitat* for "the Nightingale," and inferring its existence over a far more extensive region, where this famous songster is equally unknown. As well might the American Mocking-bird be cited as an inhabitant of India, because the *Bhim-ráj (Edolius paradiseus)* is popularly denominated "the Mocking-bird" by Europeans!*

A more prevalent misnomer we will here refer to. Why do several eminent naturalists persist in ignoring the very great difference between 'Storks' and 'Cranes,' in their total appearance, habits, anatomy, mode of breeding, and everything besides, excepting that both happen to be long-legged birds? They do so by designating the *Hurgila* or 'Adjutant' (*Leptoptilus argala*) "the gigantic Crane!" Owen, Falconer, and others may be cited in illustration; and the late Superintendent of the Calcutta Botanic Garden would habitually correct those who termed our Indian Crocodiles by their more popular name of 'Alligator,' albeit the distinctions between a Crocodile and an Alligator are of much less physiological importance than those between a Crane and a Stork! Old Æsop knew better, when he wrote his fable about the Stork netted in the bad company of the Cranes, and being condemned for such association. Now the words *Crane* and *Grus*, and the Hindustáni names of the three common Indian species, *Sáras*, *Karránch*, and *Kákarra*, all have reference to the loud trumpeting of these birds, which have a curious internal conformation resembling that of the Trumpeter Swans;† whereas the Storks

* We doubt if Dr. Hooker would have styled the *Caragana gerardiana* by its common name of 'Tartarian furze,' unless with the significant prefix "so-called!"

† The ridge or keel of the breast-bone, common to all birds that fly, is in the Cranes, belonging to the restricted genus *Grus*, and in the Trumpeter Swans, expanded so as to form a cavity, which the windpipe is prolonged to enter and reproceed from, after describing a vertical convolution therein. Mr Yarrell's figure of this curious structure, as it exists in the Hooper Swan (*Cygnus musicus*), is, in a general way, illustrative of it as observed in our three ordinary Indian Cranes (*Grus antigone, Gr. cinerea*, and *Gr. virgo*; the *Gr. leucogeranos*, which occurs rarely in the North West provinces, I have not had the opportunity of examining.) In the great Trumpeter Swan of North America (*Cygnus*

are voiceless birds, having actually no vocal muscles, and can make no sound but by clattering their mandibles together, which they do pretty loudly. In Australia, somehow, what in India we call 'White Paddy-birds,' and in Britain are the much prized Egrets, have come to be denominated 'Cranes;' and the real Crane of that country is known as the 'Native Companion.'

While on the subject of misnomers, and bearing more especially on the *fauna* of this country, we should not omit to notice the excessively vague idea which some writers will persist in attaching to the word 'India,' and to the tropical appellation *indicus* derived from it. For instance, not long ago, Mr. Gould described a new Wryneck by the name *Yunx indica;* although the bird referred to does not appear to have been met with in India, properly so called, but in Afghânistán and Tibet! We could cite other instances of Afghânistán being thus most erroneously alluded to as physically appertaining to India; in such form as this—"inhabits India, Afghânistán," with reference to a species unknown in India proper, as the *Lagomys rufescens* of Gray, which is a little quadruped found on the mountains of Afghânistán, and perhaps onward to the Hindu Kosh, but which is very unlikely to inhabit the Indian side of the passes. Again, Mr. Gould describes a kind of Nuthatch to inhabit the high mountains of "Central India;" meaning thereby the Himaláyan masses towards Kashmir, for the bird in question is unknown in Central India, properly so designated. Then we still hear of "trans-Gangetic India" and of "Netherlands India" (or the archipelago), with the term *indicus* referring to either! Even Professor Owen thus denominated the Dugong of the archipelago *Halicore indicus,*

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buccinator), the trachea even performs a second vertical convolution; while in the second wild Swan of North America (*C. americana*) and in the nearly affined Bewick's Swan (*C. Bewickii*), it is prolonged to form a horizontal loop in the body of the sternum, posterior to the vertical convolution within the keel,—that is, in general, for the writer has examined several Bewick's Swans, and has observed that some specimens do not differ in this respect from the Hooper Swan, albeit of full age and development, to all appearance. In a newly hatched Hooper Swan examined by him, not even an indication of the peculiar structure described could be detected: nor does it occur in the two species of Crowned Crane (*Balearica*), nor in the Mute Swans (*Cygnus olor, C. immutabilis, C. atratus, C. nigricollis*), nor probably in the *C. coscoroba* of South America; but the Crowned Cranes exhibit one curious anomaly in the organ of voice, which is that the long tendinous muscles, the office of which is to contract the windpipe, and which are known as the *sterno-tracheales* from their ordinary mode of attachment, are not fixed, as usual, at their lower extremities to the sides of the breast-bone, but to the middle of the first pair of ribs! The *sterno-tracheal* muscles are wanting in the 'Adjutant' and most other Storks, and in a very few other birds, such as the Condors (*Sarcorhamphus*) of the Vulture family; indeed the Vultures generally are among the most silent of the feathered creation, emitting no sound beyond a feeble cackling and snorting in their eagerness over their prey.

in distinction from that of the northern coast of Australia, at a time when the former had not been ascertained to frequent (as a Dugong of some kind is now known to do) the Malabar coast and Gulf of Calpentyn in Ceylon; but it still remains to be proved that this is the true Malayan Dugong, however little reason there may seem to doubt it,—as there might equally have seemed little cause to suspect the distinctness of the *Halicore australis!*

If the word *indicus* is to have a definite meaning, let it apply only to Hindustán and its immediate dependencies,—the proper country of the Hindu race and creed, within historic times at least (there is no occasion here to refer to the aboriginal or non-Hindu population), and which is understood to take its name from the Indus or Sind river. The very comprehensive meaning of the term "Indies" in times not quite gone by, and how the word "Indian" came to be applied to any savage race (not even excepting the Australian,) but more especially to the red men of America,—till the very thought of *India* was forgotten in connexion with it, as in

> "Lo! the poor *Indian* whose untutored mind
> Sees God in clouds and hears him in the wind;"—

these are topics familiar to every reader, and therefore most unnecessary to descant upon further.

Mr. Yarrell, in his 'History of British Birds,' is, as we think, very needlessly unsystematic in his vernacular nomenclature; and we urge this, without insisting on a system of absolute uniformity, which in some cases would appear pedantic. For example, take the genus Pochard, *Fuligula*. The 'Red-crested Pochard' (*F. rufina*) of various other authors, he styles the 'Red-crested Whistling Duck:' now the birds popularly known as 'Whistling Ducks' constitute a well-known tropical genus, *Dendrocygna*, altogether distinct and different from the Pochards. Next, the 'Red headed' or 'Dun Pochard' of other authors (*F. ferina*) he terms 'the Pochard, or Dun-bird.' The 'Ferruginous Pochard' or 'White-eyed Pochard' (*F. nyroca*,) is the 'Ferruginous Duck,' or 'White-eyed Duck.' The 'Scaup Pochard' (*F. marila*) is the 'Scaup Duck.' The 'American Scaup Pochard' (*F. mariloides*) is the 'American Scaup' only: and the 'Tufted Pochard' (*F. cristata*) is the 'Tufted Duck.' We certainly prefer adopting the name 'Pochard' as *generic*, and equivalent with *Fuligula;* and would prefer designating another bird before referred to, as a 'Bulbul,' rather than as a 'Thrush.' All practicable uniformity, even in vernacular names, is surely desirable, and positive misnomers should be scrupulously avoided.

We have next to consider the source of errors arising from

the mal-identification of species, or the non-discrimination of some which are really distinct from those for which they have been mistaken, however similar in general appearance, so as scarcely to be distinguished without actual comparison of specimens. Thus the *Acrocephalus arundinaceus* (*Sylvia turdoides* of Temminck), and the *Acr. salicarius* (*S. arundinacea* of Temminck), and also the three common British species of *Phylloscopus*, have been noted by different authors as occurring in India; and however opinions may vary in certain other instances, as to the value of differences regarded as specifical, we apprehend that no one who has had the opportunity of instituting comparison in these cases, will be disposed to unite the Indian birds with the British. However nearly the three Indian species of *Acrocephalus* may resemble their European compeers, on a superficial view, it will be found, on minute examination, that they have a somewhat different form of wing; and moreover that their habits are appreciably diverse: for whilst the European species evince a marked preference for watery situations, this can hardly be affirmed of the Indian. Even where such situations abound, as in Lower Bengal, they come more into gardens; and moreover the song of the three Indian species is soft and melodious, devoid of the harsh babbling notes of the European *Acrocephali*, in common with most other "aquatic warblers." The Indian type, indeed, presents in all respects a somewhat nearer approximation to the *Phylloscopus* group, which attains so remarkable a development (as regards the number of species comprised) in this part of the world.

Various instances occur of closely affined Indian and European birds, which every ornithologist would at once pronounce to be distinct: *e. g. Oriolus galbula* and *O. kundoo*, *Lanius excubitor* and *L. lahtora*, *Troglodytes europœus* and *Tr. sub-himalayanus*, *Certhia familiaris* and *C. himalayana*, *&c.*: and not unfrequently the exact European species inhabits this country, in addition to another which would otherwise be regarded as its counterpart or representative, or (according to the views of some naturalists) a mere local or climatal variety of the same species: thus *Circus Swainsonii* (*pallidus* of Sykes) is regarded by Prof. Schlegel as a local variety of *C. cineraceus*; had he said of *C. cyaneus* it would be more intelligible, as the affinity is much closer with *cyaneus*; nevertheless, both *Swainsonii* and *cineraceus* appear to be common throughout Africa, as both likewise are in India, inhabiting the same districts, and each remaining ever true to its distinctive characters; while *cyaneus* also inhabits the vicinity of the Himaláya, together with both the others. There are precisely the same grounds for regarding the European *Phylloscopus trochilus* and *Ph. rufus* as being 'climatal' or

'local' varieties of one species ; only these birds happen to be better known, much as they resemble each other. Again, we have the true *Falco peregrinus* common in India, together with *F. peregrinator*, which would otherwise be regarded as its Indian counterpart (a "beautiful representation," as the hackneyed phrase is;) *Hypotriorchis subbuteo* together with *H. severus ; Hirundo sinensis* (the ordinary Indian Sand Martin,) together with *H. riparia ; Cuculus canorus* (the European Cuckoo,) as also several affined species; and so on. In some cases, a European species may have two or more 'representatives' in India, or *vice versâ*. Thus *Nucifraga caryocatactes* of the pine-forests of Europe and Siberia is replaced by *N. hemispila* in those of the Himaláya generally, and by *H. multimaculata* about Kashmir ;* *Parus major* by *P. monticolus* and *P. cinereus*, if not also *P. nuchalis* (in addition to *cinereus*) in S. India ; *Picus major* by *P. himalayanus* and *P. darjellensis ; Accentor alpinus* by *A. nipalensis* and *A. variegatus :* while, on the other hand, *Lanius lahtora* in India is represented both by *L. excubitor* and *L. meridionalis* in Europe ; *Sitta cinnamoventris* by *S. europæa* and *S. cæsia, &c.* Some ornithologists regard the *Passer domesticus, P. italiæ* (vel *cisalpinus*), and *P. salicarius* (vel *hispaniolensis*), of Europe, as being local varieties merely of the same: yet they hold true to their distinctive differences of colouring, wheresoever found ; and examples of the last-named race from Afghânistán and the extreme N. W. of India differ in no appreciable respect from Algerian specimens with which we have compared them : moreover, this race is of far more gregarious habits even than *P. domesticus ;* a fact noticed of it alike in N. Africa and in Kohát.

In all the foregoing instances, the distinctions exist indisputably ; however authorities may disagree respecting their import or systematic value ; but Mr. Gould has indicated some other separations in which we are wholly unable to concur ; although it would appear that his views are adopted by his highness Charles Lucien Bonaparte, the Prince of Canino and Musignano, in his most valuable ornithological contributions to late volumes of the *Comptes Rendus* of the French 'Academie des Sciences.' For the *Bauri* or Peregrine Falcon of India, Mr. Gould adopts Latham's name *F. calidus*, thereby implying a distinction from true *peregrinus*, which we are at a loss to comprehend. With an adequate series of Indian and European and North American specimens, illustrative of the individual variation observable alike in each region, we doubt exceedingly if any one difference could be detected ; and this while recognising the

* The *Corvus columbianus* of Wilson's 'American Ornithology' is an accidental representative of this genus, as long ago determined by the Prince of Canino ; and we have heard of yet another species in the Altai.

F. macropus, Swainson (*F. melanogenys*, Gould), of Australia as properly discriminated. The European and Tibetan Ravens offer a parallel instance. The Indian Greenshank, too, has been separated from *Totanus glottis* by the name *T. glottoides;* and the latter name is adopted by Mr. Gould for the Greenshank of Australia: upon comparison of fine specimens from Scotland and Norway with others obtained in the Calcutta provision-bazar, we can discern no difference whatever.* Then Mr. Gould recognises the common Quail of India as distinct from the European Quail; and the Indian Goosander from *Mergus merganser*. M. Homeyer has discriminated the Missel Thrush common in the W. Himalaya from *Turdus viscivorus* of Europe, and has designated it *T. Hodgsoni;* it certainly does appear to be constantly somewhat larger than the European bird, with more of the albescent hue on the outer tail-feathers; and these differences must be admitted to be appreciable, however trivial, and whatever may be the value to be rightly attached to them: that, however, is a subsequent consideration, in which zoologists are never likely to concur; but all will admit that every appreciable difference should be noted, whether or not it be desirable that a new specific name should be imposed in every such instance.

The excessive subdivision of species here referred to, upon the very slightest imaginable (or imaginary) distinctions supposed to be permanent, is commonly termed *hair-splitting;* and however censured by a class of naturalists, who have faith in the prevalence of climatal and local variation, as more especially deduced from the analogy of the ascertained variation of certain protean forms in the vegetable creation,† is upheld on the principle that it is altogether impossible to draw *the line of demarcation* between *species* and such supposed *varieties*, otherwise than in the most arbitrary manner, wherein no two naturalists will agree: for every conceivable gradation may be traced in the degrees of approximation, from species which all concur in regarding as being so well characterised apart, that their distinctness is generally acknowledged, to such as are quite undistinguishable, however analogy might indicate their possible difference. By way of example, take parallel series of certain of the land-birds of Europe and North America. No reason can indeed be assigned why two species or races (inhabiting perhaps different regions of the globe, and appertaining to a series in which every grade of approximation is thus exhi-

* The alleged *T. glottoides* is simply the bird in its winter plumage, in which it is less known in Britain than in its summer garb.

† As a general rule, the *animal*, endowed with the faculty of locomotion, is much less completely subjected to the influence of local circumstances than the *plant*. The latter, once fixed, must abide by the conditions of its more or less fortuitous position; which the former can change at will, to a variable extent.

bited,) should not absolutely resemble, and yet be really as distinct as others are in which the difference is manifest. Considerations such as this must have suggested the famous theory of Lamarck, and invite a discussion which would carry us far beyond our present limits. But it will be felt to be most unphilosophical to pronounce dogmatically, as is so often done, on the vexed question of specifical variation; and moreover that analogy is not always a secure guide, further than as suggesting probabilities. The analogy of the small wading bird known as the Ruff (*Philomachus pugnax*) would lead to the conclusion that the colouring of birds is of no importance whatever, as indicative of specifical diversity: yet, in this respect, the Ruff stands forth as a single and notable exception to all the rest of its class.

The following is the very latest definition which we have chanced to meet with of the terms *species* and *variety*. In a work just published 'On the Variation of Species, with Special Reference to the *Insecta*; followed by an Enquiry into the Nature of Genera;' by J. Vernon Wollaston, a gentleman who has distinguished himself by his *entomological* researches in Madeira, we read, of *species* and *varieties*, that "I consider the *former* to involve *that ideal* 'relationship amongst all the members which the descent from a 'common parent can alone convey; whilst the latter should be 'restricted, unless I am mistaken, to the various aberrations 'from their peculiar type, which are sufficiently constant and isolated in their general character, to appear, at first sight, to be 'distinct from it."

The possible blending or *fusion* of nearly affined races is here not taken into consideration. We have remarked upon the *gradations* exhibited by parallel series of organic (or shall we say *specific?*) types from different regions, ranging from the most obvious specifical diversity (acknowledged as such by common consent) to absolute similarity, even to the minutest details of structure, proportions, size and colouring; so that the line of demarcation becomes arbitrary, as to what are to be considered *species* or *varieties*; and, being so, every naturalist is prone to have a standard of his own, and is apt to be not too scrupulous or respectful in the expression of his opinions, regarding those who happen to differ from him, even though they may have bestowed as much or perhaps more attention to the consideration of this difficult subject in all its diversified bearings. It is true, that many highly approximate races (considered, therefore, as species) do maintain their distinctness even in the same region and vicinity; as *Falco peregrinus* and *F. peregrinator*, *Hypotriorchis subbuteo* and *H. severus*, *Circus cyaneus* and *C. Swainsonii*, in this country; and *Phylloscopus trochilus* and *Ph. rufus* in Europe, or (still more approximate) the larger and smaller races of Eu-

ropean Bullfinches in the forests of Germany:* but others equally or more different do unquestionably interblend when they meet upon the confines of their geographical ranges; and, according to current ideas, should therefore be at once classed as varieties of one and the same species,—which, however, is rather "jumping to a conclusion," or, in another phrase, "begging the question." The instances may be comparatively few; but it is from no paucity of adducible cases in other classes, far indeed from it, that we here limit our attention to birds. The *Coracias bengalensis* of all India meets, in the Punjab, &c., the European *C. garrula;* and we are unaware that it interbreeds with it: but in Asám, Sylhet, Tippera, and more rarely Lower Bengal, it co-exists with the *C. affinis,* specimens of which from the Burmese countries are ever true to their proper coloration, as those of *C. bengalensis* are from Upper and S. India; but we have seen every conceivable gradation or transition from one type of colouring to the other, in examples from the territories where the two races meet: so also with the *Treron phœnicopterus* of Upper India and the *Tr. chlorigaster* of S. India and Ceylon, which blend in Lower Bengal; and *Gallophasis albocristatus* of the W. Himaláya and *G. melanotus* of Sikhim, which produce an intermediate race in Nepal; and *G. Cuvieri* of Asám and Sylhet, and *G. lineatus* of Burma, which interbreed in Arakan, &c., so that every possible transition from one to the other can be traced, as demonstrated by a fine series of preserved specimens in the museum of the Asiatic Society in Calcutta. If inhabiting widely separated regions, the (assumed) distinctness of such races would be at once granted; as with *Phasianus colchicus* and the Chinese *Ph. torquatus,* which readily intermix and blend, wherever the latter has been introduced in Europe! How, therefore, with *Garrulus glandarius* and *G. japonicus?*† *Turdus viscivorus* of Europe and the so called *T. Hodgsoni* of the west Himaláya? *Palumbes torquatus* and *P. casiotis* of the same regions respectively? *Podiceps cristatus* of the northern hemisphere (with all Africa) and *P. australis*

* *Pionne et Double Pionne* of the French bird-catchers.

† Dr. Schlegel even considers (or did consider) "the Himaláyan Jay" (meaning probably *G. bispecularis*) as a "variety" of *G. glandarius!* Admit this, and there is indeed an end to all discriminative classification or distinction of species which happen to bear a certain resemblance in their colouring (not even a near resemblance, in this particular instance)! Why the American Waxwing or 'Cedar-bird' (*Ampelis carolinensis*) differs much less from the Wandering Waxwing (*A. garrulus*) than those two Jays do one from the other; and the 'Cedar-bird' was thought to be a degenerate "climatal variety" of the other by Buffon; whereas the latter has since proved to be likewise an inhabitant of North America, neither degenerate, nor differing in any respect, from the species as observed elsewhere.

of New Holland; with numberless other cases, supposing the races to come into contact, as has happened with the Pheasants already named? Again, some of the American and European races which have been separated on even slighter grounds! Have not such already coalesced in some instances, so as to result in what is called *a variable species?* For it by no means follows that approximate races should necessarily inhabit different regions. We know how sundry wild Canines (*i. e.* Wolves and Jackals), considered as distinct species, merge by domestication into Dogs, which everywhere breed and intermingle; and how the humped cattle interbreed with the Yak in the trans-Himaláyan territories, and with the European type of cattle wherever the opportunity offers; the mixed offspring being, according to all the reliable information we can gather, in every way as prolific as the parent sources! These instances may still be regarded as *exceptional,* in a general way; but they nevertheless do occur, and certainly to an extent that should render us most cautious in dogmatizing!

There are many who consider the Parrot Crossbill (*Loxia pityopsittacus*) to be merely a larger and more robust variety of the Common Crossbill (*L. curvirostra*). By the same rule, the Himaláyan Crossbill (*L. himalayana*) should be regarded as a smaller and considerably less robust variety of the same species; in which case, the amount of variation would indeed be extraordinary, and we should expect to find every intermediate gradation. Supposing them to be only "climatal varieties" of one species, it would seem to follow that the more *poleward* this vagrant bird *normally* inhabits, the larger and more robust does it become: but it is curious that while the Parrot Crossbill is, for the most part, a more northern race than the Common Crossbill (which latter ranges over the circuit of northern regions), its counterpart in the New World (*L. mexicana*) is the more southern of the two races! We do not happen to have seen the *mexicana;* but, as regards the others, with also the White-winged Crossbill proper to the Old World (*L. bifasciata*) and that proper to the New (*L. leucoptera*), consider them to be just as worthy of discrimination, as so many permanent types subordinate to the genus *Loxia,* as are the species which have been generally accepted as such in other genera; and until it can be proved that one of them is produceable from another, or that transitions occur from one to another (otherwise than as the result of intermixture, should this ever happen), that we are justified in regarding them as distinct species, rather than as varieties of the same species, in conformity with the generally accepted idea of a species in other instances.

The Crossbills, in a general way and with unimportant exceptions, may be said to inhabit wherever there are pine-forests; however rare, comparatively, in those of the Himaláya: and they are birds of remarkably vagrant habits, which therefore should not be particularly subject to climatal or local influences, whatever these may be, to induce permanent variation, as manifested by a series of distinct races. The *permanency* of such races, *as a general rule*, and indisposition of them to blend one with another, even though inhabiting the same district, is an indisputable fact; notwithstanding even that a few cases may be adduced to the contrary (as already mentioned), which indeed are chiefly remarkable for their *highly exceptional* character—so far as present information extends. An overwhelming majority is on the other side, with approximate races which are *fairly recognisable;* and this can hardly (or with difficulty) be admitted of the Himaláyan Missel Thrush or the Australian Crested Grebe, each as compared with its European counterpart: we might even cite the *Palumbes torquatus* and *P. casiotis!* Such races would scarcely be recognised apart, if inhabiting the same region; or, if indicated by a Brehm, would be acknowledged by few indeed! They would probably soon blend more or less completely; whereas such races as those of the Crossbills, the *Bauri* and *Shâhin* Falcons of India, the British *Phylloscopus trochilus* and *Ph. rufus*, and the different European Sparrows, maintain themselves persistently distinct; and this while the common Sparrow of India would probably blend with the British Sparrow (though considered distinct by some), if an opportunity should occur of its doing so. By the same rule, affirmative or negative, that any of the races here noticed are recognised as distinct species or as varieties of the same species, we may continue to generalize, step by step, till far more dissimilar races are regarded in either light, such as would otherwise be unhesitatingly considered as distinct species: and we accordingly return to the proposition that it is absolutely impossible to indicate the stage of discrimination between *species* and *varieties*, in such manner as to command general concurrence.

In these remarks, we have intentionally abstained from all speculation on the origin of species and varieties, in connexion with lapse of time and geological phænomena: partly because the known facts which would have to be presented for consideration are equally complicated and inconclusive with those already treated of, and certainly afford no light, as yet, upon the question of *the gradual development of species*, as some naturalists incline to suppose. We have been content to discuss the subject in its existent aspect of view, without reference to the past; and with the special object of illustrating the main diffi-

culty encountered, which is the *impossibility* of rigorously determining *species*, in a vast number of instances.

We now proceed to give a detailed notice of the species of British birds described by Mr. Yarrell, bearing reference to the occurrence of many of them in this country; with some remarks also on various other European species, which, though not hitherto met with in the British islands, are sufficiently known in India to merit such passing attention. The systematic names in Roman capitals are those here adopted; while the names following them in Italics and within brackets are taken from Mr. Yarrell's work, as are also the English names adopted by that naturalist. The order of classification likewise is that of Mr. Yarrell, however little we may feel disposed to concur in some few of the allocations:—

1. GYPS FULVUS. (*Vultur fulvus*; 'Griffon Vulture.') Inhabits the high mountains of Europe and Asia, inclusive of the Himaláya and its vicinity: common in Dalmatia, Greece, and the islands of the Mediterranean; less so on the Alps, and exceedingly rare and accidental in the British islands and northern provinces of France.* Replaced in the Pyrenees, Sardinia, and Barbary, by the nearly affined G. OCCIDENTALIS; in E. Africa by G. RUPPELLII; and in S. Africa by G. KOLBII; also generally over India and the Malay countries by G. INDICUS, a much smaller bird. All are remarkable for possessing fourteen tail-feathers, whereas other birds of prey have twelve only; even their congener, G. BENGALENSIS, which is the commonest Indian Vulture about and near towns, and is also met with in E. Africa. As Mr. Yarrell does not appear to discriminate the G. OCCIDENTALIS, it is just possible that the bird which he notices appertains to that particular race, rather than to the genuine G. FULVUS of the Himaláya.†

The G. FULVUS is the 'great white Vulture' of the Himaláya; and the 'great black Vulture' of the Himaláya, VULTUR MONACHUS, may yet be found to stray so far west as Britain; since it has several times been shot in Schleswig and Holstein, also in Provence, Languedoc, Dauphiné, &c. It is not rare in the Pyrenees, Sardinia, Sicily, and mountainous regions of the S. E. of Europe.

The great African V. AURICULARIS has been observed in Greece, and has once been killed in France (in Provence): this resembles V. PONTICERIANUS, the so called 'King Vulture' common over the plains of India, but is much larger, equalling V. MONACHUS in size; while the latter has also an analogous diminutive in Africa, in the V. OCCIPITALIS.

* In Macedonia, this species was noticed by Captain Drummond to be "most numerous in the plains as well as the mountains."—*Ann. Mag. Nat. Hist.* XVIII, 10.

† *Vide* 'Journal of the Asiatic Society,' vol. xxiv, 253 and note, for the particular distinctions of these several kinds of Vulture.

2. NEOPHRON PERCNOPTERUS. ('Egyptian Vulture.') *Rachamah* of the Appendix to Bruce's travels; *Pharaoh's chicken, &c.* Inhabits Europe, Asia, and Africa, abounding in most warm regions; very common on the plains of Upper Hindustán, and the table-land of peninsular India; but not observed in Lower Bengal below the tide-way of the Gangetic rivers: common in the southern parts of Europe; but very rare and accidental in the British islands, and also in Scandinavia. This bird is evidently the 'Kite' of Major A. Cunningham's 'Ladák' (p. 205). He writes—"the eagle *(cha-nak,** or the 'black bird') and the kite *(chákor*, or the white bird*)* are common enough, and so is the large raven." A second species of this genus, the N. PILEATUS, inhabits Africa only.†

* *Bya*, generally pronounced *Cha*, is simply a bird. *Bya-nag*, is the 'black bird;' and *Byai d'Khar*, means the 'white bird.' (Cunningham.)

† Mr. C. J. Andersson, in his interesting work entitled 'Lake Ngami,' notices the curious fact of this Vulturine bird resorting to vegetable food. In the desert sandy region extending southward from Walfisch (*i. e.* 'Whale-fish') Bay, along the eastern coast of South Africa, "a kind of prickly gourd (called, by the natives, *naras*,) of the most delicious flavour" occurs in great abundance; the creeping plant that bears it covering almost every little sand-hillock; and moreover fixing, "with wonderful tenacity, by means of its extensive ramifications, the constantly shifting sands: it is, indeed," remarks Mr. Andersson, "to those parts what the sand-reed *(Ammophila arundinacea)* is to the sandy shores and downs of England. In this barren and poverty-stricken country, food is so scarce, that without the 'naras' the land would be all but uninhabitable. It is not man alone, that derives benefit from this remarkable plant; for every quadruped from the Field Mouse to the Ox, and even the feline (!) and canine races, devour it with great avidity. Birds are, also, very partial to it, more especially Ostriches, who during the 'naras' season are found in great abundance in these parts. *I have seen the White Egyptian Vulture feed upon it.*"

Captain Watkins, in a paper on the Ornithology of Andalusia ('Zoologist,' November, 1856), states that he possesses, alive, a common Kite *(Milvus regalis)* and also a Black Kite *(M. ater)*. "These birds, in their present domestic state, have a great *penchant* for vegetables and fruits. I have watched them often in my kitchen-garden plucking the pods of peas, and eating the contents; a bed of radishes, also, (which I was at a loss to conceive what had demolished,) I one morning found occupied by my two pets, eagerly devouring them: they could not have been driven to it by hunger, as they were well supplied with birds and young Rabbits. Since the figs and peaches have been ripe, they have indulged most freely in their taste for fruit, nothing pleasing them better than a fig."

In the *Annals and Magazine of Natural History*, xii (1843), p. 269, the curious fact is recorded of the Jaguar (FELIS ONCA) striking down and devouring the nests of a honey-producing Wasp of S. America!

In a recent notice of the devastations of Locusts in South Africa, we observed the NEOPHRON PERCNOPTERUS designated as the 'Locust-bird'; making its appearance in vast numbers to prey on the destructive insects: but it is not what is ordinarily known as the 'Locust-bird' in that part of the world, which is a much smaller bird, appertaining to the Starling or Maina group.

According to Sir James Alexander, as quoted by Mr. Andersson, (and given on the authority of the natives about the Orange river,) when the Ostriches have left their nest in the middle of the day in search of food, "a white Egyptian Vulture may be seen soaring in mid-air, with a stone between his talons. Having carefully surveyed the ground below him, he suddenly lets fall the stone and then follows it in rapid descent. Let the hunter run to the spot, and he will find a nest of probably a score of eggs, some of them broken by the Vulture." We have all heard of the story of an Eagle, or a Gull, or a Crow,

The Lämmergeyer (GYPAETOS) inhabits the high mountains of Europe, Asia, and Africa; from the Altai even to the Cape colony. Authorities differ with respect to the value to be attached to certain differences observed in specimens from different regions. The Prince of Canino identifies the Himaláyan with G. BARBATUS of the Alps, while he recognises as distinct G. ALTAICUS of Gebler from the Altai, and G. NUDIPES of Brehm (*meridionalis* of Keyser and Blasius) from S. Africa. M. Malherbe remarks that specimens from the Pyrenees and Sardinia are of inferior size to those from the Swiss Alps; and this smaller race is the *G. barbatus occidentalis* of Schlegel. Even the Himaláyan is said to differ from that of eastern Europe by having a pectoral dark band not observed in the other, and is the G. HEMACHALANUS of Capt. Hutton. The constancy of the alleged distinctions seems to need confirmation, preparatory to an estimation of their value. The Himaláyan bird is commonly mis-called 'Golden Eagle' by English residents.

3. AQUILA CHRYSAETOS. ('Golden Eagle.') Inhabits the mountainous regions of Europe, Asia, and N. America (being the only true AQUILA in the New World); rare in N. Africa; and in India confined to the Himaláya. M. Degland inclines to the opinion that a larger and smaller race exist, the former inhabiting a colder region; but this much needs confirmation. We can perceive no difference between British and Himaláyan examples.

The AQ. MOGILNIK, or 'Imperial Eagle' of Temminck (*Aq. heliaca*, Savigny), inhabits generally a warmer climate than AQ. CHRYSAETOS, and is extensively diffused over the mountainous regions of S. E. Europe, Asia, and N. Africa, including those of India (being the *chrysaëtos* of Dr. Jerdon's Catalogue of the birds of S. India). In Europe it has been observed so far north as in Jutland; but never in the British islands.

4. AQUILA NÆVIA. ('Spotted Eagle.') Inhabits Europe, Asia, and Africa; being common in the hilly parts of India, and even in the Bengal Sundarbáns. Very rare in N. Europe; but has been shot

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(for the anecdote is current of all of them,) dropping the 'shell-fish' upon a stone; and of the bird's mistaking the philosopher's bald pate for one: but here the case is reversed; for the stone is taken up and dropped on the eggs of the Ostrich. In his account of the British Carrion Crow, Mr. Mudie remarks—"There are modern instances of the story of the ancient philosopher who was killed by a Crow mistaking his head for a stone, and dropping an Oyster on it in order to break the shell. One of these was seen by the celebrated Watt. A Crow caught up a crab, rose with it to a considerable height, and dropped it—not on the head of a modern philosopher, or he might have come off more safely than the ancient one,—but on a stone, and descended to her feast." Again, Mr. Selby remarks, of the Hooded Crow, "I have repeatedly observed one of these birds to soar up to a considerable height in the air, with a cockle or mussel in its bill, and then drop it upon the rock, in order to obtain the contents." Anecdotes of Gulls performing the same feat are recorded in Cabanis' 'Journal fuer Ornitholigie,' Vol. III (1844-5): so that there is no particular reason to disbelieve the assertion of the NEOPHRON dropping a stone on the eggs of the Ostrich.

near the town of Schleswig, and has even been known to breed in Ireland.

There are two affined species in India, AQ. HASTATA, nearly as large but less robust, and AQ. FULVESCENS, distinct from AQ. NÆVIOIDES of Africa* (the 'Wokháb' noticed in p. 149), which is smaller and more robust,—a miniature of AQ. MOGILNIK. Neither of them has been observed in Europe.

EUTOLMAETOS FASCIATUS. (*Falco Bonellii*, de la Marmora.) Inhabits the southern parts of Europe, with Asia and N. Africa; being replaced in S. Africa by EU. BELLICOSUS: in India and Ceylon confined to the hilly parts, where far from rare.

HIERAETUS PENNATUS. Inhabits E. Europe, Asia, Africa, India generally, and Ceylon: differing very little (if at all) from H. MORPHNOIDES of Australia: a rare species in Europe. Prof. Schlegel doubts the proper *habitat* of this bird: it is not uncommon in India, preying much on domestic Pigeons.

5. HALIAETUS ALBICILLA. ('White-tailed Eagle.') Inhabits Europe (chiefly to the northward), and Siberia: unknown in India (but replaced by H. FULVIVENTER): has been observed in Greenland, and North Africa; being, for the most part, migratory in North Europe, though not in Britain.

6. PANDION HALIAETUS. ('Osprey.') Of universal distribution; the Australian only differing but slightly. Common in India; and migratory in the far north.

7. FALCO CANDICANS. (*Falco gyrfalco;* 'Gyr Falcon.') An Arctic species, very rare in temperate regions: the *Shangar* of Indian falconry seems to denote it, as a bird of excessively rare occurrence in the Punjab. Some writers separate from it an Icelandic race, either as a distinct species or variety, respecting which there is much difference of opinion.†

The F. SACER, Schlegel (*F. lanarius* apud Temminck and Gould), a very rare species in East Europe, seems to belong properly to Middle Asia, and occurs rarely in the Himaláya.

The F. LANARIUS, Schlegel, an inhabitant of the South East of Europe, differs very slightly from the Indian F. JUGGUR, Gray.

8. FALCO PEREGRINUS. ('Peregrine Falcon.') Inhabits Europe, Asia, North Africa, if not also North and South America: the South African race smaller; and the Australian F. MACROPUS (*melanogenys* of Gould) very nearly affined. Common in India; also a nearly affined species, F. PEREGRINATOR, which resorts more to the hills, and is the *F. ruber indicus* of Aldrovand. Although the Indian and also the North American races are considered different from the European by some, we doubt the existence of any permanent distinction whatsoever.

9. HYPOTRIORCHIS SUBBUTEO. (*Falco subbuteo;* the 'Hobby.')

* Vide Journal of the Asiatic Society, vol. xxiv, 255.

† M. Degland even distinguishes F. CANDICANS, F. ISLANDICUS, and F. GYRFALCO: while Dr. Schlegel admits F. GYRFALCO, F. CANDICANS, and F. CANDICANS ISLANDICUS."

All Europe, Asia, and Africa; migratory: common in the Himaláya; rarer in S. India; a cold weather visitant in Lower Bengal, together with an affined species, H. SEVERUS. Both are somewhat crepuscular in habit.*

10. ERYTHROPUS VESPERTINUS. (*Falco rufipes;* the 'Red-footed Falcon.') Europe, Asia, and N. Africa: rare in Britain: not uncommon in India, in large flocks, which visit Lower Bengal during the rainy season.

E. CENCHRIS. (*Falco tinnunculoides* of Vieillot.) Resembles E. VESPERTINUS in structure and habits, and both appear to be exclusively insectivorous, seizing their prey on the ground and not habitually on the wing (like the 'Hobby'). Geographical range also similar, or nearly so; but this has not been known to stray into Britain. Both are migratory.

11. LITHOFALCO ÆSALON. (*Falco æsalon;* the 'Merlin.') Inhabits Europe, Asia Minor, Mesopotamia, Persia, N. Africa, S. Africa (A. Smith), N. America (rare): but has not hitherto been met with in India; though likely to occur in the N. W., as especially in the Punjab: migratory; though in Britain within the limits of the island.

12. TINNUNCULUS ALAUDARIUS. (*Falco tinnunculus;* the 'Kestrel.') All Europe, Asia, Africa, with the great Asiatic archipelago. Very common in India, sometimes in large flocks. The commonest bird of prey in England and France.

13. ASTUR PALUMBARIUS. ('Goshawk.') Europe, Asia, and N. Africa: rare in Britain; much commoner in Scandivania, and generally over Europe, where migratory: common in the Himaláya.

14. ACCIPITER NISUS. ('Sparrow-hawk.') Europe, Asia, and N. Africa: common in the hilly parts of India; rare in the plains, where abundantly replaced by MICRONISUS BADIUS. Migrates partially in northern regions.†

15. MILVUS REGALIS. (*M. vulgaris*; 'Kite.') Europe, Siberia, Asia Minor, N. Africa; unknown in India, but abundantly replaced by M. GOVINDA (which differs little from M. ATER of E. Europe and W. Asia, and from M. AFFINIS of Australia). Migratory in Scandivania.

16. NAUCLERUS FURCATUS. ('Swallow-tailed Kite.') An American bird, which has twice been met with in Great Britain, but in no other part of Europe.

17. BUTEO VULGARIS. ('Common Buzzard.') Europe, N. Africa, Asia Minor: higher mountains of India; being common in the W. Himaláya, rare in the Nilgiris, and replaced on the plains by B.

* This fact has been noticed by Captain Drummond of H. SUBBUTEO. Vide *Ann. Mag. Nat. Hist.* 1843, p. 423.

† There is a nearly affined race in the Malay countries, ACC. NISOIDES, distinguished by having a white throat with three distinct dark stripes, and no rufous on the under-parts of the adult male. In other respects, quite similar to ACC. NISUS; and by no means to be confounded with ACC. VIRGATUS, which likewise has the throat-stripes.

CANESCENS. Rare, and to the northward and far west only, in America: mostly migratory in Scandinavia.

18. ARCHIBUTEO LAGOPUS. (*Buteo lagopus*; 'Rough-legged Buzzard.') Northern regions generally: all Europe, migratory: N. and S. (!) Africa. Unknown in India.

19. PERNIS APIVORA. ('Honey Buzzard.') Europe, Asia, N. Africa: migratory. In India common (if identically the same), in addition to P. CRISTATA.*

20. CIRCUS ÆRUGINOSUS. ('Marsh Harrier.') Europe, Asia, N. Africa: very common in India. Migrates in Scandinavia.

21. CIRCUS CYANEUS. ('Hen Harrier.') Europe, Asia, Africa: the American C. ULIGINOSUS barely, if at all, separable. In India, common in the sub-Himaláyan region and its vicinity: being replaced southward by C. SWAINSONII (*pallidus* of Sykes).

22. CIRCUS CINERACEUS. (*C. Montagui*; 'Montagu's Harrier.') Europe, S. Asia, Africa: very common in India.†

The CIRCAETUS GALLICUS is a bird of South Europe, Asia, and Africa, which is common in India, and has been killed in Denmark; but never in the British islands.

23. BUBO MAXIMUS. ('Eagle Owl.') Europe, Siberia, China, Asia Minor, Babylonia, Barbary; Himalaya? If so, very rare.

24. SCOPS ALDROVANDI. ('Scops eared Owl.') Europe, Asia Minor, N. Africa: migratory. In India replaced by affined species; more especially SC. BAKKAMŒNA (the *Scops sunia* et *pennata* of Hodgson), which seems to be generally diffused over the country. No. 24 is admitted in the Catalogue of species from Nepal and Tibet presented to the British Museum by Mr. Hodgson; but referring doubtless to a grey specimen of the BAKKAMŒNA.‡

25. SCOPS ASIO. (*Strix asio*; 'American Mottled Owl': Mr. Yarrell's preface.) A North American bird, of which a pair were observed in England, and one of them shot.

26. ASIO OTUS. (*Otus vulgaris*; 'Long-eared Owl.') Europe, N. Africa, Asia Minor, N. Asia, N. America: in India, confined to the Himaláya, where not uncommon.

27. ASIO BRACHYOTUS. (*Otus brachyotus*; 'Short-eared Owl.') Europe, Asia, Africa, N. and S. America:§ migratory. Common in India.

28. STRIX FLAMMEA. ('White or Barn Owl.') Europe, Africa,

* In the crestless or sub-crested Indian specimens (adults), there is a marked tendency to the development of three dark stripes on a white throat, as in the ASTUR TRIVIRGATUS and sundry other Indian species. Can such be of a hybrid race between P. APIVORA and P. CRISTATA?

† Mr. Yarrell gives one instance of Nos. 21 and 22 interbreeding; the male being of the latter species. *Vide* his description of the 'Hooded Crow.'

‡ Gradations from the grey to the chesnut-coloured varieties of SC. BAKKAMŒNA may be seen in the museum of the Asiatic Society, Calcutta.

§ The American has recently been distinguished by the name BRACHYOTUS CASSINII: but we are unaware upon what grounds. Sir W. Jardine remarks, of a collection from the Bermudas, "CIRCUS CYANEUS and OTUS BRACHYOTUS we cannot distinguish from European specimens." ('Contributions to Ornithology.')

Asia Minor, Babylonia: unknown in India, where abundantly replaced by STR. JAVANICA.

29. SYRNIUM ALUCO. (*S. stridulum*; 'Tawny Owl.') Europe, N. Africa, Asia Minor, N. Asia to Japan (Temminck). S. NIVICOLUM, common in the W. Himalaya, rarer eastward, is barely separable.

30. NYCTEA NIVALIS. (*Surnia nyctea*; 'Snowy Owl.') Arctic regions: rare in mid-Europe and in the United States of America.*

31. SURNIA FUNEREA. ('Hawk Owl.') Northern regions of both continents: rare in middle and S. Europe. Has been known to stray so far south as Bermuda.

32. ATHENE PSILODACTYLA. (*Noctua passerina*; 'Little Owl.') Europe, N. Africa, W. Asia, Afghânistán, N. W. Himaláya. A much larger species than the true ATH. PASSERINA (*Strix acadica* of Temminck) of N. Europe, which has not been observed in the British islands.

33. NYCTALE TENGMALMI. (*Noctua Tengmalmi*; 'Tengmalm's Owl.') Northern regions of both continents; rare in N. and S. Europe. Is affined to No. 31.†

34. LANIUS EXCUBITOR. ('Great Grey Shrike.') Europe, chiefly northward; common in Lapland: W. Asia (Mesopotamia); N. Africa (if L. MERIDIONALIS has not been mistaken for it). The N. American L. SEPTENTRIONALIS and L. EXCUBITORIDES considered distinct. Replaced in India by L. LAHTORA.

35. ENNECTIORNIS COLLURIO. (*Lanius collurio*; 'Red-backed Shrike.') Europe, Africa, W. Asia, S. Siberia: migratory.

36. ENNECTIORNIS RUFUS. (*Lanius rufus*; 'Woodchat Shrike.') Europe, all Africa: migratory.

37. BUTALIS GRISOLA. (*Muscicapa grisola*; 'Spotted Flycatcher.') Europe, W. Asia, N. Africa:‡ migratory.

38. MUSCICAPA ATRICAPILLA. ('Pied Flycatcher.') Europe, N. Africa: migratory.

The M. ALBICOLLIS, another European species, is cited from Arabia by Prof. Schlegel; and the ERYTHROSTERNA PARVA, or 'Robin Flycatcher' of E. Europe, is abundantly replaced in India by the nearly affined E. LEUCURA.

39. CINCLUS AQUATICUS. ('Common Dipper.') Inhabits Europe, W. Asia (vicinity of Trebizond and Erzeroum), and also the western part of Siberia; but is replaced in the Himaláya by C. ASIATICUS.

40. TURDUS VISCIVORUS. ('Missel Thrush.') Europe, W. Asia: its representative in the W. Himaláya appears to be constantly a little larger and has more of the whitish hue upon the outermost

* It has been known to occur, however, so far south as the Bermudas, where two were shot in October, 1846! "They were observed sitting on a prostrate spar in a little sandy bay, and were mistaken for Gulls." (Wedderburn, in Jardine's 'Contributions to Ornithology.')

† "A specimen obtained in February, which had lighted on a schooner, 150 miles N. N. W. of the Bermudas." (Jardine's 'Contributions to Ornithology.')

‡ The Prince of Canino separates the Cape species as B. AFRICANA. *Comptes Rendus*, XXXVIII, 652.

tail-feathers; upon which slight differences, M. Homeyer distinguishes it by the name T. HODGSONI.

41. OREOCINCLA WHITEI. (*Turdus Whitei;* 'White's Thrush.') A Siberian species, according to the Prince of Canino, with 14 tail-feathers! Distinct from the very similar O. DAUMA of India (from the Hindustáni word *Dáma*, equivalent to 'Thrush'), with which it has been supposed identical.*

42. TURDUS PILARIS. ('Fieldfare.') Europe, W. Asia: migratory. One specimen has been killed at Saháranpur.† In the Himaláya generally, replaced by T. ATROGULARIS, a common bird of N. Asia, which occasionally strays into Europe and has been obtained so far west as in Denmark; in this country it occurs sparingly in Lower Bengal during the cold season. T. FUSCATUS of Pallas (*Naumanni* of Temminck), another species inhabiting Siberia and Japan, and straying rarely into Europe, has been once obtained in Nepal.

43. TURDUS MUSICUS. ('Song Thrush.') Europe, Siberia, W. Asia, Egypt, Barbary.

44. TURDUS ILIACUS. ('Redwing.') Europe, W. Asia, Barbary; has been observed in large flocks in Kohát. Migratory: breeding in the extreme north.

45. TURDUS MERULA. ('Blackbird.') Europe, W. Asia, N. Africa, Madeira; Afghânistán? Kashmir? China? We have seen females from Afghânistán and Chusan, which we could not distinguish from the common European Blackbird; and are assured of its being common in the mountains surrounding Kashmir, at from 10,000 to 13,000 feet elevation. The Prince of Canino has recently distinguished a nearly affined "MERULA DACTYLOPTERA" from Syria.‡

The TURDUS or MERULA SIMILLIMA of the mountainous parts of S. India and M. KINNISII of those of Ceylon, though nearly affined, are sufficiently well distinguished from the Blackbird of Europe. In the Himaláya generally, the latter is replaced by M. BOULBOUL (*pœciloptera* of Vigors), which is not unfrequently brought in cages to Calcutta, where known as the 'Kástura.'

46. TURDUS TORQUATUS. ('Ring Ousel.') Europe, Asia Minor, N. Africa: migratory. Replaced in the Himaláya by T. ALBOCINCTUS.

47. PYCNONOTUS AURIGASTER. (*Turdus aurigaster;* 'Golden-vented Thrush.') A true Bulbul, the *Col d'or* of Levaillant; common in Africa, and once only obtained in England: otherwise unknown in Europe.§

48. ORIOLUS GALBULA. ('Golden Oriole.') Europe, W. Asia (Mesopotamia), N. Africa: migratory. Rare in Britain. Replaced in India by O. KUNDOO.

* *Comptes Rendus.*

† Now in the India-house museum, London.

‡ *Comptes Rendus, t. XLIII.* 412.

§ Another African Bulbul, the P. OBSCURUS, has been observed in Adanlusia.

49. OROCETES SAXATILIS. (*Petrocincla saxatilis*; 'Rock Thrush.') Europe, W. Asia, N. Africa: migratory. Very rare in Britain. Replaced in India by O. CINCLORHYNCHA.

The PETROCOSSYPHUS CYANEUS of Europe seems undistinguishable in Afghânistán, Kashmir, and the Punjab; but is replaced further east by P. AFFINIS, and generally over Hindustán by P. PANDU, which is very closely affined.

50. ACCENTOR ALPINUS. ('Alpine Accentor.') Europe: especially replaced by A. NIPALENSIS and A. VARIEGATUS in the Himaláya, where several other species inhabit. Another Accentor in Siberia, which has been killed in Austria, A. MONTINELLUS, is replaced by A. HUTTONI in the W. Himaláya and by A. STROPHIATUS in Nepal and further eastward.

51. ACCENTOR MODULARIS. ('Hedge Accentor.') Europe, W. Asia.

52. ERYTHACA RUBECULA. ('Robin.') Europe, W. Asia, N. Africa.

53. CYANECULA WOLFI. (*Phœnicura suecica*; 'Blue-throated Warbler.') Europe, W. Asia, Japan (Temminck), N. Africa; rare in Britain: migratory: abundantly replaced in India by C. SUECICA, and in middle Asia, Afghânistán, &c., by S. CÆRULECULA (*cyane* of Eversmann); the first known by its pure white pectoral spot, which spot is always deep ferruginous in the Indian bird, and is wanting in that from middle Asia.*

54. RUTICILLA PHŒNICURUS. (*Phœnicura ruticilla*; 'Redstart.') Europe, W. Asia, Siberia (Schlegel), Japan, (Temminck,) N. Africa: migratory. Replaced in Sindh and Afghânistán by R. PHŒNICUROIDES, which is probably the PHŒNICURUS noted from Nepal. There are numerous Himaláyan species; and one, R. RUFIVENTRIS, is generally diffused over India.

55. RUTICILLA TITHYS. (*Phœnicura tithys*; 'Black Redstart.') Europe, N. Africa, W. Asia (or there perhaps confounded with the affined R. ERYTHROPROCTA of Gould).

56. PRATINCOLA RUBICOLA. (*Saxicola rubicola*; 'Stone-chat.') Europe, N. Africa, Japan (Temminck.) In India replaced by the nearly affined PR. INDICA, and in Sindh also by PR. LEUCURA, as in S. Africa by PR. PASTOR.

57. PRATINCOLA RUBETRA. (*Saxicola rubetra*; 'Whinchat.') Europe, N. Africa, Arabia (Schlegel): migratory. Erroneously assigned to India.

58. SAXICOLA ÆNANTHE. ('Wheatear.') Europe, W. Asia, plains of Upper India, N. Africa, Arctic regions, Greenland! Migratory.

* In the *Naumannia*, Vol. V. (1855,) as we learn from the 'Natural History Review,' for January, 1857, four kinds of CYANECULA are distinguished, by the names *suecica*, *orientalis*, *dichrosterna*, and *Wolfi*. One of them is probably the *leucocyana* of Naumann. The Prince of Canino, however, recognises as many as five, if not six species (or distinct races); regarding the Indian as one of them. Vide *Comptes Rendus*, t. XXXVIII., p. 9.

There are several other Indian Wheatears, all of of which are different from those of Europe, excepting S. LEUCOMELA; but S. STAPAZINA is replaced in India by S. ATROGULARIS, and S. LEUCURA by S. LEUCUROIDES (*opistholeuca* of Strickland), which occurs likewise in N. E. Africa.*

59. LOCUSTELLA RAYI. (*Salicaria locustella;* 'Grasshopper Warbler.') Europe, Asia, N. Africa: migratory. Has once been obtained in Central India, and once in Lower Bengal; where an affined species, L. RUBESCENS, is not uncommon. Both specimens are in the Calcutta museum.

60. ACROCEPHALUS ARUNDINACEUS. (*Salicaria turdoides;* 'Thrush-like Warbler.') Europe, N. Africa, Arabia (Schlegel), Japan (Temminck); rare in Britain: migratory. Replaced in India by ACR. BRUNNESCENS.

61. CALAMODYTA PHRAGMITIS. (*Salicaria phragmitis*; 'Sedge Warbler.') Europe, Asia Minor, S. Siberia (Schlegel), N. Africa: migratory.

62. PSEUDOLUSCINIA SAVII. (*Salicaria luscinioides;* 'Savi's Warbler.') S. Europe, N. Africa; rare in Britain: migratory.

63. ACROCEPHALUS SALICARIUS. (*Salicaria arundinacea;* 'Reed Warbler.') Europe, N. Africa: migratory. This, with ACR. PALUSTRIS and ACR. MEDIUS, are replaced in India by ACR. DUMETORUM and ACR. AGRICOLUS.

64. ERYTHROPYGIA GALACTOTES. (*Salicaria galactotes;* 'Rufous Sedge Warbler.') Africa, S. Europe (chiefly Spain); very rare in Britain. Appertains to a strictly African genus, of which this species only visits Europe in summer.

65. LUSCINIA PHILOMELA. (*Philomela luscinia;* 'Nightingale.') Europe, N. Africa, Asia Minor: migratory. Replaced in Persia by a nearly affined species (L. MAJOR? seu *Sylvia philomela* of Temminck?), which is often brought to India as a cage-bird, where termed *Bulbul bosta.*

66. SYLVIA ATRICAPILLA. (*Curruca atricapilla;* 'Blackcap Warbler.') Europe, W. Asia, Arabia (Schlegel), Japan (Temminck), all Africa. One killed in Java (Temminck).

67. SYLVIA HORTENSIS. (*Curruca hortensis;* 'Garden Warbler.') Europe, N. Africa: migratory.

68. SYLVIA CINEREA. (*Curruca cinerea:* 'Common Whitethroat.') Europe, Asia Minor, Arabia (Schlegel), N. Africa: migratory.

69. SYLVIA CURRUCA. (*Curruca sylviella*; 'Lesser Whitethroat.') Europe, Asia, Africa: migratory. Common in India; and a nearly affined but larger species in S. India, S. AFFINIS (*Curruca cinerea* apud Jerdon).

70. SYLVIA ORPHEA. (*Curruca orphea;* 'Orpheus Warbler.') Europe, N. Africa, Arabia (Schlegel); rare in Britain: migratory. The Indian race seems to differ only in having a somewhat longer bill: inhabiting both Upper Hindustán and S. India.

* S. STAPAZINA is noted by Dr. Schlegel from the Altai and Dauria; S. LEUCURA from Arabia; and S. STAPAZINA and S. AURITA from Arabia Petræa.

71. PHYLLOSCOPUS SIBILATRIX. (*Sylvia sibilatrix;* 'Wood Warbler.') Europe, Asia Minor, N. Africa: migratory.

72. PHYLLOSCOPUS TROCHILUS. (*Sylvia trochilus;* 'Willow Warbler.') Europe, Asia Minor, N. Africa; W. India (apud Gould, but needs confirmation): migratory. Has been known to stray to N. America.

73. PHYLLOPNEUSTE HIPPOLAIS. (*Sylvia hippolais;* 'Melodious Willow Warbler.') Europe, N. Africa; rare in Britain: migratory.

74. PHYLLOSCOPUS RUFUS. (*Sylvia rufa;* 'Chiff-chaff.') Europe, Asia Minor, N. Africa: migratory.

75. MELIZOPHILUS PROVINCIALIS. (*M. dartfordiensis;* 'Dartford Warbler.') S. Europe (S. France, S. England), Barbary.

76. REGULUS CRISTATUS. ('Golden-crested Regulus.') Europe, N. Asia, Japan, W. Asia, Barbary: partially migratory. Replaced in the W. Himálaya by R. HIMALAYENSIS.

77. REGULUS IGNICAPILLUS. ('Fire-crested Regulus.') Europe, N. Africa: rare in Britain.

78. REGULOIDES PROREGULUS. (*Regulus modestus;* 'Dalmatian Regulus.') Asia; very rare in Europe: one specimen obtained in Dalmatia and another in England. Common in India, with several affined species.

Here may be mentioned that the CISTICOLA SCHŒNICOLA of S. Europe, N. Africa, Mesopotamia, &c., is abundantly replaced in India by the barely distinguishable C. CURSITANS.

79. PARUS MAJOR. ('Great Tit.') Europe, N. Asia, Japan, N. Africa. Replaced in India, Ceylon, and Java, by P. CINEREUS, and in the Himaláya also by P. MONTICOLUS.

80. PARUS CÆRULEUS. ('Blue Tit.') Europe, N. Asia, Japan, China, Formosa.

81. PARUS CRISTATUS. ('Crested Tit.') Europe, Siberia; local in N. Britain.

82. PARUS ATER. ('Cole Tit.') Europe, Siberia, Japan, Formosa. Replaced in Nepal by P. ŒMODIUS.

83. PARUS PALUSTRIS. ('Marsh Tit.') Europe, Siberia.

84. ORITES CAUDATUS. (*Parus caudatus;* 'Long-tailed Tit.') Europe, N. Asia, Japan.

85. CALAMOPHILUS BIARMICUS. ('Bearded Tit.') Europe, abundant in Holland, and on the reedy borders of the Black and Caspian Seas. The Prince of Canino distinguishes a C. SIBIRICUS from Kamtschatka.*

86. AMPELIS GARRULUS. (*Bombycilla garrula;* 'Bohemian Waxwing.') Northern regions. (Many visited Algeria in 1841.)

87. MOTACILLA YARRELLII. ('Pied Wagtail.') Europe; chiefly Britain and Scandinavia in summer. Replaced in India by M. LUZONIENSIS (*leucopsis* of Gould and *alboides* of Hodgson.)

88. MOTACILLA ALBA. 'White Wagtail.') Europe, N. Africa; rare in Britain. Replaced in India by M. DUKHUNENSIS.

* *Comptes Rendus*, t. XLIII., 413.

89. CALOBATES SULPHUREA. (*Motacilla boarula;* 'Grey Wagtail.') Europe, Asia, Africa, Malay countries, Australia? Migratory within the British islands: common in India.

90. BUDYTES FLAVA. (*Motacilla flava;* 'Grey-headed Wagtail.') Europe, N. Africa; rare in Britain: migratory. Replaced in India by B. VIRIDIS.

91. BUDYTES RAYI. (*Motacilla Rayi;* 'Ray's Wagtail.') W. Europe, N. Africa; common in Britain: migratory.

92. PIPASTES TRIVIALIS. (*Anthus arboreus;* 'Tree Pipit.') Europe, N. Asia, Japan, W. Asia, N. Africa; Himaláya (but much confounded with the common *P. agilis* of India): migratory.

93. ANTHUS PRATENSIS. ('Meadow Pipit.') Europe, N. Asia, Japan, Asia Minor, W. India (Gould), Nepal (Hodgson, Gray); one specimen received from Pegu.

94. ANTHUS OBSCURUS. (*A. petrosus;* 'Rock Pipit.') Europe, Siberia, Japan. Replaced in the Himaláyan region by A. CERVINUS, which is likewise found in Europe.

95. CORYDALLA RICHARDI. (*Anthus Ricardi;* 'Richard's Pipit.') Europe, Asia, N. Africa; common in India; very rare in Britain.

The C. CAMPESTRIS, a common European bird which even abounds in the southern parts of Sweden, but has not hitherto been observed in Britain, is also common in parts of India.

96. OTICORYS ALPESTRIS. (*Alauda alpestris;* 'Shore Lark.') N. America chiefly, though not very rare in N. Europe. In Kashmir replaced by O. PENICILLATA; and a species recently distinguished as O. LONGIROSTRIS has been obtained near Agra.*

97. ALAUDA ARVENSIS. ('Sky Lark.') Europe, N. Asia, N. Africa, Asia Minor. A specimen killed in Bermuda! We happen to know that the late M. Audubon turned loose a number of birds of this species in the United States, but have seen no notice of their having multiplied. Generally replaced over India by A. MALABARICA, and in the Himaláya by A. DULCIVOX (at once distinguished by the relative proportions of the wing-feathers.)

98. GALERIDA CRISTATA. (*Alauda cristata;* 'Crested Lark.') Europe, Asia, N. Africa; rare in Britain; common in India, where known as the *Chándul.*

99. ALAUDA ARBOREA. ('Wood Lark.') Europe, Asia Minor, N. Africa.

* There is also an O. BILOBA (Ruppell, *bicornis* of Ehrenberg) from Arabia; and the Prince of Canino separates the N. American bird as O. CORNUTA, and again the Mexican as O. CHRYSOLŒMA. (*Comptes Rendus,* tom. xxxviii, 64-5.) As regards the European, Major Lloyd remarks, that—"until the few last years this bird, whose proper home is the high north, was not included in the Scandinavian fauna; but recently it has been met with, as well in Eastern Finmark, as on the western coast of Scania, where, indeed, upwards of fifty were shot during the winter or spring of 1849. It has been found in a few instances in Denmark." These 'Horned Larks', appertain generally to cold regions; though O. BILOBA would seem to be an exception. Certain of them are the only representatives of the Lark family in the New World; where the *Alauda Spragui* of Audubon is now ascertained to be not a Lark, but a Pipit of the genus CORYDALLA, according to the Prince of Canino, while M. Schlater forms of it his new genus NEOCORYS,

100. CALENDRELLA BRACHYDACTYLA. (*Alauda brachydactyra*; 'Short-toed Lark.') S. Europe, Asia, N. Africa; rare in Britain; extremely common in India, where currently known to Europeans as the 'Ortolan.'

The CERTHILAUDA DESERTORUM of Spain and N. Africa inhabits Sindh; and the AMMOMANES LUSITANIA occurs in the deserts of N. W. India, being replaced further south by A. PHŒNICURA.

101. CENTROPHANES RAPPONICUS. (*Plectrophanes lapponicus*; 'Lapland Bunting.') Arctic regions chiefly. Very rare in Britain.

102. PRECTROPHANES NIVALIS. ('Snow Bunting.') Arctic regions; a winter visitant in Britain; in America observed so low as in the Bermudas, and some have been known to rear their young in the White Mountains of New Hampshire (Peabody.)

103. EMBERIZA MILIARIA. ('Common Bunting.') Europe, W. Asia, Arabia (Schlegel), Barbary.

104. EMBERIZA SCHŒNICULUS. ('Black-headed Bunting.') Europe, S. Siberia, Barbary.

105. EMBERIZA CITRINELLA. ('Yellow Bunting.') Europe, to beyond the polar circle: replaced in the W. Himaláya by E. PITHYORNIS, an inhabitant also of Siberia, which occurs rarely in W. Europe.

106. EMBERIZA CIRLUS. ('Cirl Bunting.') S. Europe, Asia Minor, Barbary.

107. EMBERIZA HORTULANA. ('Ortolan Bunting.') Europe, Asia Minor: replaced in S. and W. India and in Afghânistán by E. BUCHANANI.

The E. CIA of S. Europe is common in the W. Himalaya;* and E. PUSILLA, which seems to be plentiful in Sikhim, has occasionally been observed in Europe, even so far west as Leyden. E. FUCATA of N. Asia, Japan, and common in the W. Himaláya, occurs sometimes in considerable numbers in Lower Bengal. E. MELANOCEPHALA of S. Europe is common in parts of India.

108. FRINGILLA CŒLEBS. ('Chaffinch.') Europe, Siberia. (The Barbary and Madeira species distinct.)

109. FRINGILLA MONTIFRINGILLA. ('Mountain Finch.') Europe, N. Asia, Japan, Asia Minor, Afghânistán, Kashmir, W. Himaláya; a winter visitant in Britain. The European MONTIFRINGILLA NIVALIS has been obtained at Kandahar.

110. PASSER MONTANUS. ('Tree Sparrow.') Europe, Asia (commoner to the eastward), Siberia, Tibet, Sikhim, Arakan, Malayan peninsula, Jáva, China, Japan.

111. PASSER DOMESTICUS. ('House Sparrow.') Europe, Asia, N. Africa; the Indian race (*P. indicus* of Jardine and Selby) differing slightly from the European in the paleness of the females and young, the much more albescent hue of the lower-parts, and bright rufous colouring on the back of the adult male.

The PASSER SALICARIUS (vel *hispaniolensis*) of Barbary and the southern parts of Europe, Asia Minor, Bokhára, and Afghânistán,

* *E. Stracheyi*, Moore, appears to be no other than E. CIA in fine summer plumage.

visits the Pesháwur valley and Kohát in large flocks, being everywhere more highly gregarious than P. DOMESTICUS. P. PETRONIA (v. PETRONIA STULTA), also of S. Europe and N. Africa to Madeira; is common in Afghânistán.

112. LIGURINUS CHLORIS. (*Coccothraustes chloris;* 'Greenfinch.') Europe, Asia Minor, N. Africa.

113. COCCOTHRAUSTES VULGARIS. ('Hawfinch.') Europe, Siberia, China, Japan (*qu.* C. JAPONICUS, Schlegel?)

114. CARDUELIS ELEGANS. ('Goldfinch.') Europe, Asia Minor, (Trebizond), Barbary. Replaced in middle Asia (inclusive of the W. Himaláya) by C. CANICEPS.

115. CHRYSOMITRIS SPINUS. (*Carduelis spinus;* 'Siskin.') Europe, Siberia, Japan: a winter visitant chiefly in Britain, breeding in the far north.

116. LINOTA CANNABINA. ('Common Linnet.') Europe, Siberia, Japan, Asia Minor, Barbary.

117. LINOTA CANESCENS. ('Mealy Redpole.') Northern regions chiefly, Greenland, Japan: an irregular winter visitant in Britain.

118. LINOTA LINARIA. ('Lesser Redpole.') Circuit of northern regions; a common winter visitant in S. Britain.*

119. LINOTA MONTIUM. ('Mountain Linnet.') Europe, N. Asia, Japan: N. or S. Britain, according to season: replaced in Afghânistán by L. BREVIROSTRIS.

The CARPODACUS ERYTHRINUS, which is rare in the N. E. of Europe, is a common winter visitant over the greater part of India.

120. PYRRHULA VULGARIS. ('Bullfinch.') Europe, W. Asia. (The Japanese and two Himaláyan species distinct.)

121. STROBILOPHAGA ENUCLEATOR. (*Corythus enucleator;* 'Pine Grosbeak.') Circuit of northern regions: rare in Britain; common in Scandinavia. Some try to separate this bird in N. America.

122. LOXIA CURVIROSTRA. ('Common Crossbill.') Circuit of northern regions: all Europe; Afghânistán: an irregular visitant in Britain: in America it has been obtained so far south as in the Bermudas. A much smaller species inhabits the Himaláya, the L. HIMALAYANA.

123. LOXIA PITYOPSITTACUS. ('Parrot Crossbill.') Europe, Siberia: rare in Britain; much commoner in Scandinavia.

124. LOXIA BIFASCIATA. ('European White-winged Crossbill.') N. Europe and Asia. Himaláya (Gould): rare in Britain.

125. LOXIA LEUCOPTERA. ('American White-winged Crossbill.') N. America: very rare in Europe.

126. AGELAIUS PHŒNICEUS. ('Red-winged Starling.') N. America: a rare straggler in Britain.

127. STURNUS VULGARIS. ('Common Starling.') Europe, Asia, Africa, Azores: common in the Himaláya and N. India, Kashmir, Afghânistán, &c., as in Britain. *N. B.*—An Afghân specimen, assigned to ST. UNICOLOR, appertains to the present species, being an

* "LINARIA MINOR. Stragglers in November and March" in the Bermudas! (Jardine's 'Contributions to Ornithology.')

old male with the pale specks obsolete: the true ST. UNICOLOR of Sardinia, Barbary, &c., is very distinct and much less bright in its glosses.

128. PASTOR ROSEUS. ('Rose-coloured Pastor.') Europe, Asia, and Africa: common in India; rare in Britain.

129. FREGILUS GRACULUS. ('Chough.') High mountains and sea-cliffs of Europe, Asia, and Africa: common in high Central Asia, the Himaláyas, Afghânistán, &c.; as is also the PYRRHOCORAX ALPINUS of the Swiss Alps and Pyrenees.

130. CORVUS CORAX. ('Raven.') Circuit of northern regions; rare in N. Africa, Punjáb, Kashmir, Afghânistán; the Tibetan species considered distinct, but probably on insufficient evidence.

131. CORVUS CORONE. ('Carrion Crow.') Europe, Afghânistán, (Pushut), Japan (*apud* Temminck.)—Replaced in India by C. CULMINATUS.

132. CORVUS CORNIX. ('Hooded Crow.'*) Europe, Asia Minor, Afghânistán, Japan (Temminck), Barbary. Considered by some to be identical in species with No. 131.

133. CORVUS FRUGILEGUS. ('Rook.') Europe, N. and W. Asia, Afghânistán, Pesháwur valley, Kashmir: replaced in China and Japan by C. PASTINATOR.

134. CORVUS MONEDULA. ('Jackdaw.') Europe, Siberia, Barbary, W. Asia, Pesháwur valley, Kashmir.

135. PICA CAUDATA. ('Magpie.') Europe, W. Asia, Siberia, E. N. America, China? Japan? Replaced in Afghânistán and W. Tibet by P. BACTRIANA, in E. Tibet by P. BOTTANENSIS, in China and Japan (?) by P. MEDIA, and in Barbary by P. MAURITANICA.

136. GARRULUS GLANDARIUS. ('Jay.') Europe, N. Africa? (G. MELANOCEPHALUS is the species which inhabits Barbary.) Replaced in the Himaláya by G. BISPECULARIS and G. GULARIS.

137. NUCIFRAGA CARYOCATACTES. ('Nutcracker.') Europe, Siberia, Kamtschatka: rare in Britain: replaced in Kashmir by N. MULTIMACULATA, and generally over the Himaláya by N. HEMISPILA.

138. DRYOSCOPUS MARTIUS. (*Picus martius*; 'Great Black Woodpecker'.) Europe, Siberia, Asia Minor: very rare in Britain.

139. GECINUS VIRIDIS. (*Picus viridis*; 'Green Woodpecker.') Europe, W. Asia, Barbary: replaced in the Himaláya by G. OCCIPITALIS and other species.

140. PICUS MAJOR. ('Great Spotted Woodpecker.') Europe, Asia Minor: replaced by the affined P. NUMIDICUS in Barbary, in the W. Himaláya, &c., by P. HIMALAYANUS, and in the E. Himaláya by P. DARJELLENSIS.

141. PICUS MINOR. ('Lesser Spotted Woodpecker.') Europe, Siberia, Barbary.

142. YUNX TORQUILLA. ('Wryneck.') Europe, Asia, N. Africa, China, Japan, Kamtschatka; common in India, as in Britain: migratory.

* In Orkney this name is applied to the small Gull, LARUS RIDIBUNDUS!

143. CERTHIA FAMILIARIS. (' Common Creeper.') Circuit of northern regions, all Europe, Barbary: replaced in the W. Himaláya by C. HIMALAYANA, in Nepal by C. NIPALENSIS, and in Sikhim by C. DISCOLOR.

144. TROGLODYTES VULGARIS. (' Wren.') Europe, W. Asia, Barbary: replaced by TR. SUBHEMACHALANA in the Himaláya generally (and there is a second species, TR. PUNCTATUS, in Sikhim), and in Japan by TR. FUMIGATUS. With these exceptions, the type is proper to the New World, where the group is largely developed.

145. UPUPA EPOPS. (' Hoopoe.') Europe, Asia, Africa; a common winter-visitant in Lower Bengal, but generally replaced by a nearly affined race in Upper Hindustán and S. India.

146. SITTA CÆSIA. (*S. europæa.*) Britain, France, Middle and S. Europe: replaced by *S. europæa*, L. (*uralensis* of Lichtenstein,) in Scandinavia, Siberia, &c., and in the Himaláya by S. CINNAMOVENTRIS.

The SITTA SYRIACA, or 'Rock Nuthatch' of S. E. Europe and Asia Minor, or a species of similar habits (most probably the same), inhabits Afghânistán: and the TICHODROMUS MURARIUS, or Wall Creeper of S. Europe, is very common in the Himaláya, Afghânistán, &c.

147. CUCULUS CANORUS. (' Common Cuckoo.') Europe, Asia, Africa, Malay countries: common in the Himaláya, visiting the plains during the cold season.

148. OXYLOPHUS GLANDARIUS. (*Cuculus glandarius;*) ' Great Spotted Cuckoo.') S. Europe, N. Africa; rare in Britain: migratory. Replaced by two congeners in India.

149. COCCYZUS AMERICANUS. (' Yellow-billed American Cuckoo.') N. America: a rare straggler in Britain.

150. CORACIAS GARRULA. (' Roller.') Europe, Africa, W. Asia, Afghânistán, Kashmir, Sindh, Punjab; migratory in Europe; and rare in Britain.

151. MEROPS APIASTER. (' Beeeater.') Europe, Africa, W. Asia, Afghânistán, Kashmir, Sindh, Punjab? migratory in Europe, and rare in Britain.

152. ALCEDO ISPIDA. (' Kingfisher. ') Europe, N. Africa, W. Asia: replaced in India by A. BENGALENSIS.

153. CERYLE ALCYON. (*Alcedo alcyon;* ' Belted Kingfisher.') N. America: a rare straggler in Britain.

154. HIRUNDO RUSTICA. (' Swallow.') Europe, Asia, Africa; migratory: common in the plains of India during the cold season.

155. HIRUNDO URBICA. (' Martin.') Europe, Africa, Asia, (Siberia;) somewhat rare (or local ?) in India: migratory.

156. HIRUNDO RIPARIA. (' Sand Martin.') Europe, Asia, Africa, N. America; migratory: in India local, and mostly replaced by H. SINENSIS.

The H. RUPESTRIS of S. Europe is common in the high mountains of India; and there is a diminutive of it also in the H. CONCOLOR of Sykes.

157. PROGNE PURPUREA. (*Hirundo purpurea;* ' American Purple Martin.') N. America: a rare straggler in Britain.

158. CYPSELUS APUS. ('Common Swift.') Europe, N. Africa, W. Asia, Afghânistán: migratory.

159. CYPSELUS MELBA. (*C. alpinus:* 'Alpine Swift.') High mountains (chiefly) of Europe, Asia, and Africa: tolerably common in the Himaláya, Central India, Nilgiris, and Ceylon: rare in Britain.

The ACANTHYLIS CAUDACUTA, or large Spiny-tailed Swift of the Himaláya, has once been shot in England, according to Mr. Gould.

160. CAPRIMULGUS EUROPÆUS. ('Night-jar.') Europe, N. Africa, W. Asia; Siberia and Kamtschatka (Pennant:) migratory. Several species inhabit India.

161. PALUMBUS TORQUATUS. (*Columba palumbus;* 'Ring Dove.') Europe, N. Africa, W. Asia; migratory in Scandinavia. Replaced in the W. Himaláya by the barely separable P. CASIOTIS.

162. COLUMBA ÆNAS. ('Stock Dove.') Europe, N. Africa, W. Asia; migratory in Scandinavia. Replaced by an affined species in India.

163. COLUMBA LIVIA. ('Rock Dove.') Europe, N. Asia to Japan, N. Africa: abundantly replaced in India by the barely separable C. INTERMEDIA.

164. TURTUR AURITUS. (*Columba turtur;* 'Turtle Dove.') Europe, N. Africa, Asia Minor: migratory. Replaced by T. RUPICOLUS, (Pallas, v *gelastis* of Temminck ?) in the W. Himaláya, and by *T. meena* generally over the country. *N. B.* The T. GELASTIS (Temminck), identical with the Japanese race, has been obtained in the North of Sweden; and a race affined to T. AURITUS inhabits Upper Egypt, T. ISABELLINUS.

165. ECTOPISTES MIGRATORIUS. ('Passenger Pigeon.') A rare straggler from N. America.

166. PHASIANUS COLCHICUS. ('Common Pheasant.') Indigenous to Mingrelia, and all the hilly country about the Black and Caspian seas: an introduced species over Europe generally.

167. TETRAO UROGALLUS. ('Capercali.') Europe, N. Asia, Caucasus and Taurus.

168. TETRAO TETRIX. ('Black Grouse.') Europe, N. Asia, Caucasus and Taurus.

169. LAGOPUS SCOTICUS ('Red Grouse.') British islands exclusively (though recently introduced into Switzerland). Believed by many to be a local variety of the continental L. ALBUS (v. *subalpinus* v. *saliceti*.)

170. LAGOPUS MUTUS. (*L. vulgaris;* 'Ptarmigan.') Snowy mountains of Europe, W. Asia, and N. America. Unknown in the Himaláya, where no bird of the Grouse tribe has been observed.

171 STARNA CINEREA (*Perdix cinerea;* 'Common Partridge.') Europe, S. Siberia, Asia Minor; Mesopotamia? Persia? Egypt? a near congener lately discovered in Tibet.

172. PERDIX RUFA. ('Red-legged Partridge.') Europe only, Madeira (introduced ?). Introduced into Britain.

173. PERDIX PETROSA. ('Barbary Partridge.') N. Africa, S. Europe, Caucasia. Introduced into Britain.

174. ORTYX VIRGINIANA. ('Virginian Colin.') Introduced from N. America.

175. COTURNIX VULGARIS. ('Common Quail.') Europe, Asia, Africa: chiefly migratory. Abundant in India, though Mr. Gould considers the race of this country to be distinct.

176. TURNIX ANDALUSICA. (*Hemipodius tachydromus*; 'Andalusian Hemipode.') S. Europe, N. Africa, Asia Minor, Mesopotamia; a rare straggler in Britain; replaced in India by three other species, but more especially by *T. Dussumieri* and *T. Sykesi*.

177. OTIS TARDA. ('Great Bustard.') Europe, Asia Minor, Tartary, to beyond Lake Baikal (Pennant.) The race extirpated in Britain, though stray birds occasionally find their way there.

178. TETRAX CAMPESTRIS. (*Otis tetrax*; 'Little Bustard.') Europe, N. Africa, Asia Minor, Mesopotamia, extreme N. W. of India (Peshâwur valley.)

179. HOUBARA MACQUEENII. (*Otis Macqueenii*; 'Macqueen's Bustard.') N. W. of India, Afghânistán, &c. Very rare in Europe.

180. CURSORIUS EUROPÆUS. ('Cream-coloured Courser.') Africa, W. Asia: very rare in Britain.

181. ŒDICNEMUS CREPITANS. ('Great Plover.') Europe, Asia, Africa: common in India.

182. GLAREOLA TORQUATA. ('Collared Pratincole.') Europe, Africa, W. Asia: rare in Britain: replaced in India by the nearly affined GL. ORIENTALIS.

183. PLUVIALIS APRICARIUS. (*Charadrius pluvialis*; 'Golden Plover.') Europe, W. Asia, N. Africa. Replaced by a distinct species in India, and generally over Asia, Africa, and Oceanica, the PL. LONGIPES.

184. EUDROMIAS MORINELLUS. (*Charadrius morinellus*; 'Dottrel.') Europe, N. Africa, W. Asia: migratory.

185. CHARADRIUS HIATICULA. ('Ringed Plover.') Europe, N. Asia, Japan, Greenland.

186. CHARADRIUS CANTIANUS. ('Kentish Plover.') Europe, Asia: not uncommon in India.

187. CHARADRIUS PHILIPPINUS. (*Ch. minor*; 'Little Ringed Plover.') Europe, Asia, N. Africa: rare in Britain; exceedingly common in India. CH. PYRRHOTHORAX, a very common Indian species, is known in Europe as a straggler.

188. CALIDRIS ARENARIA. ('Sanderling.') Circuit of northern regions, N. and S. Africa, N. Guinea: rare in India (so far as observed hitherto; but probably not so along the sea-coast.)

189. SQUATAROLA HELVETICA. (*Sq. cinerea*; 'Grey Plover.') Circuit of northern regions, Japan, Jáva, N. Guinea, Australia: tolerably common in India.

190. VANELLUS CRISTATUS. ('Lapwing.') Europe, N. and middle Asia, N. Africa; common in N. India, Sindh, &c., but not seen in Lower Bengal.

191. STREPSILAS INTERPRES. ('Turnstone.') Inhabits all sea-coasts, from the equator to the poles: common along those of India.

192. HÆMATOPUS OSTRALEGUS. ('Oyster-catcher.') Circuit of northern regions, to the equator, if not further south: not rare along the shores of the Bay of Bengal, &c.

193. GRUS CINEREA. ('Common Crane.') Europe, Asia, N.

Africa: migratory: now rare in Britain: common in India during the cold season.

194. ARDEA CINEREA. ('Common Heron.') Europe, Asia, N. and S. Africa: common in India.

195. ARDEA PURPUREA. ('Common Heron.') Europe, Asia, Africa: common in India.

196. HERODIAS ALBA. (*Ardea alba;* 'Great White Heron.') Europe, Asia, N. Africa: very rare in Britain: very common in India, though the race is considered different by some.

197. HERODIAS GARZETTA. (*Ardea garzetta;* 'Little Egret.') Europe, Asia, N. Africa: exceedingly rare in Britain: very common in India.

198. HERODIAS BUBULCUS. (*Ardea russata;* 'Buff-backed Heron.') Europe, Asia, N. Africa: exceedingly rare in Britain: very common in India.

199. ARDEOLA COMATA. (*Ardea comata;* 'Squacco Heron.') Europe, W. Asia, Africa, replaced in India by A. LEUCOPTERA.

200. ARDETTA MINUTA. (*Botaurus minutus*; 'Little Bittern.') Europe, all Africa, W. Asia, Himaláya, Kashmir; replaced in Lower Bengal by A. SINENSIS, and more abundantly by A. CINNAMOMEA, which is common throughout India.

201. BOTAURUS STELLARIS. ('Common Bittern.') Europe, Asia, all Africa: common in India.

202. BOTAURUS LENTIGINOSUS. ('American Bittern.') A rare straggler from America.

203. NYCTICORAX GARDENI. ('Night Heron.') Europe, Asia; Africa, N. America (? Species at least barely separable): very common in India.

204. CICONIA ALBA. ('White Stork.') Europe, Asia, N. Africa, migratory: common in India during the cold season in immense flocks in Lower Bengal.

205. CICONIA NIGRA. ('Black Stork.') Europe, Asia, N. Africa: not uncommon in India.

206. PLATALEA LEUCORODIA. ('White Spoonbill.') Europe, Asia, all Africa: common in India.

207. FALCINELLUS IGNEUS. ('*Ibis falcinellus;* 'Glossy Ibis.') Europe, Asia, Africa, N. and S. America, Australia: very common in India.

208. NUMENIUS ARQUATA. ('Common Curlew.') Europe, N. Africa, Asia (to Japan), Malasia: very common in India.

209. NUMENIUS PHŒOPUS. ('Whimbrel.') Europe, Asia, N. Africa: common in India, along sea-coast and estuaries.

210. NUMENIUS BOREALIS. ('Esquimaux Curlew.') A rare straggler from N. America.

211. TOTANUS FUSCUS. ('Spotted Red-shank.'*) Europe, Asia; common in India.

212. TOTANUS CALIDRIS. ('Common Red-shank.') Europe, Asia: very common in India.

* Why *spotted!* 'Dusky Redshank' is much better; while 'Spotted' applies rather to No. 212, each in its summer plumage.

213. TOTANUS BARTRAMI. ('Bartram's Sandpiper.') A straggler from America: one specimen obtained in N. S. Wales!

214. TOTANUS FLAVIPES. ('Yellow-shanked Sandpiper.') A straggler from America.

215. ACTITIS OCHROPUS. (*Totanus ochropus;* 'Green Sandpiper.') Europe, Asia, N. Africa: very common in India.

216. ACTITIS GLAREOLA. (*Totanus glareola;* 'Wood Sandpiper.') Europe, Asia, Africa, from Lapland to the Cape of G. Hope; Java, &c.: exceedingly common in India.

217. ACTITIS HYPOLEUCOS. (*Totanus hypoleucos;* 'Common Sandpiper.') Europe, Asia: exceedingly common in India.

218. ACTITIS MACULARIUS. (*Totanus macularius;* 'Spotted Sandpiper.') A rare straggler from America: one killed in Algeria!

219. TOTANUS GLOTTIS. ('Green-shank.') Europe, Asia, Africa, Australia; stragglers obtained in N. America: very common in India.

220. RECURVIROSTRA AVOCETTA. ('Avocet.') Europe, Asia, all Africa: not rare in India.

221. HIMANTOPUS CANDIDUS. (*H. melanopterus;* 'Black-winged Stilt.') Europe, Asia, all Africa: common in India.

222. LIMOSA ÆGOCEPHALA. (*L. melanura;* 'Black-tailed Godwit.') Europe, Asia, N. Africa, Australia: very common in India.

223. LIMOSA RUFA. ('Bar-tailed Godwit.') Europe, N. Africa, W. Asia: Nepal (Hodgson, Gray), Java and Timor (Temminck).

224. PHILOMACHUS PUGNAX. (*Machetes pugnax;* 'Ruff.') Europe, Asia, N. Africa: common in India.

225. SCOLOPAX RUSTICOLA. ('Woodcock.') Europe, Asia, N. Africa: very common in the Himaláya, not rare in the Nilgiris, more so in the highlands of Ceylon; a specimen occasionally shot in Lower Bengal.

226. GALLINAGO SABINI. (*Scolopax Sabini;* 'Sabine's Snipe.') A very rare European bird, and hitherto only met with in Europe; indeed chiefly in the British islands.

227. GALLINAGO MAJOR. (*Scolopax major;* 'Great Snipe.') Europe, W. Asia, Barbary: replaced in the Himalaya, &c., by G. NEMORICOLA and G. SOLITARIA.

228. GALLINAGO SCOLOPACINUS. (*Scolopax gallinago;* 'Common Snipe.') Europe, Asia, N. Africa: very common in India.

229. GALLINAGO GALLINULA. (*Scolopax gallinula;* 'Jack Snipe.') Europe, Asia, Barbary: common in India.

230. MACRORHAMPHUS GRISEUS. ('Brown Snipe.') N. America chiefly; rare in Europe; replaced in India by M. SEMIPALMATUS.

231. TRINGA SUBARQUATA. ('Curlew Sandpiper.') Circuit of northern regions, to beyond the equator; Australia! Very common in India.

232. TRINGA CANUTUS. ('Knot.') Circuit of northern regions: rare in India.

233. TRINGA RUFESCENS. ('Buff-breasted Sandpiper.') A straggler from America.

234. TRINGA PLATYRHYNCHA. ('Broad-billed Sandpiper.') Europe, Asia; Sumatra, Borneo, Timor (Temminck): not uncommon in India: rare in the U. S. of America.

235. TRINGA MINUTA. ('Little Stint.') Europe, Asia: very common in India.

236. TRINGA TEMMINCKII. ('Temminck's Stint.') Europe, Asia, N. Africa: common in India.

237. TRINGA PUSILLA. (*Vide* Preface.) A straggler from America.

238. TRINGA SCHINZII. ('Schinz's Sandpiper.') A straggler from America.

239. TRINGA PECTORALIS. ('Pectoral Sandpiper.') A straggler from America.

240. TRINGA ALPINA. (*Tringa variabilis;* 'Dunlin.') Arctic regions; circuit of northern regions; Japan; Timor (Temminck); Guiána: not rare in India.

241. TRINGA MARITIMA. ('Purple Sandpiper.') Arctic regions; Europe; N. America.

242. PHALAROPUS FULICARIUS. ('Grey Phalarope.') Circuit of northern regions: one specimen obtained near Calcutta.

243. LOBIPES HYPERBOREUS. (*Phalaropus hyperboreus;* 'Red-necked Phalarope.') Circuit of northern regions: one specimen obtained near Madras, another in Nicarágua, and a pair in the Bermudas.

244. CREX PRATENSIS. ('Landrail.') Europe, Asia, N. Africa: common in Afghânistán, rare in the N. W. of India: a specimen obtained in the Bermudas.

245. PORZANA MARUETTA. (*Crex porzana;* 'Spotted Crake.') Europe, Asia, N. Africa: common in India.

246. PORZANA PUSILLA. (*Crex pusilla;* 'Little Crake.') Europe, N. Africa, W. Asia, Japan: Nepal (Hodgson).

247. PORZANA BAILLONII. (*Crex Baillonii;* 'Baillon's Crake.') Europe, Asia to Japan, all Africa: exceedingly common in India.

248. RALLUS AQUATICUS. ('Water Rail.') Europe, N. Africa, W. Asia: replaced in India by a nearly affined race, R. INDICUS.

249. GALLINULA CHLOROPUS. ('Moorhen.') Europe, Asia, all Africa: common in India.

250. FULICA ATRA. ('Common Coot.') Europe, Asia, N. Africa (where found additional to F. CRISTATA): America and Javanese species distinct: common in India.

251. ANSER CINEREUS. (*Anser ferus;* 'Grey-lag Goose.') Europe, and Asia: common in India.

252. ANSER SEGETUM. ('Bean Goose.') Europe, Asia, N. Africa, Greenland.

253. ANSER BRACHYRHYNCHUS. ('Pink-footed Goose.') Europe, N. Asia: Punjab (rare?)

254. ANSER ALBIFRONS. ('White-footed Goose.') Circuit of northern regions.

255. BERNICLA LEUCOPSIS. (*Anser leucopsis;* 'Bernicle Goose.') N. Europe and Asia, Greenland, Hudson's Bay.

256. BERNICLA BRENTA. (*Anser torquatus;* 'Brent Goose.') Circuit of northern regions.

257. BERNICLA RUFICOLLIS. (*Anser ruficollis;* 'Red-breasted Goose.') N. Asia, chiefly: rare in N. India.

258. CHENALOPEX ŒGYPTIACUS. (*Anser ægyptiacus;* 'Egyptian Goose.') Africa, S. Europe.

259. PLECTROPTERUS GAMBENSIS. (*Anser gambensis*; 'Spur-wing Goose.') Straggler from Africa.

260. BERNICLA CANADENSIS. (*Anser canadensis;* 'Canada Goose.') N. America chiefly, Greenland: in Britain accidental (if not escaped from confinement, or the descendants of such).

261. CYGNUS MUSICUS. (*Cygnus ferus;* 'Hooper Swan.') N. Europe and Asia; N. Africa; migratory: one specimen obtained in the valley of Nepal.*

262. CYGNUS BEWICKII. ('Bewick's Swan.') Europe, Siberia.

263. CYGNUS OLOR. ('Mute Swan.') Europe, N. Asia, W. Asia, N. Africa: the wild still common in Scandinavia, but not in Britain.

264. CYGNUS IMMUTABILIS. ('Polish Swan.') Europe, N. Asia?

265. CASARCA RUTILA. (*Tadorna rutila;* 'Ruddy Shieldrake.') Europe and Asia, N. Africa (replaced in S. Africa by C. CANA): very common in India.

266. TADORNA VULPANSER. ('Common Shieldrake.') Europe, Asia, N. Africa: common in the Punjab; not rare in Lower Bengal.

267. SPATULA CLYPEATA. (*Anas clypeata;* 'Shoveller.') Circuit of northern regions, N. Africa: tolerably common in India.

268. ANAS STEPERA. ('Gadwall.') Circuit of northern regions; Barbary: tolerably common in India.

269. ANAS ACUTA. ('Pintail Duck.') Circuit of northern regions, Barbary: very common in India.

270. ANAS BOSCHAS. ('Wild Duck.') Circuit of northern regions, Barbary: in India confined to Sindh, Punjab, and the Himaláya and its vicinity; replaced southward by A. PŒCILORHYNCHA.

271. ANAS QUERQUERDULA. ('Gargany.') Europe, Asia, N. Africa: very common in India.

* Mr. Yarrell's figure of this bird does not convey a correct impression of it, as seen alive. Its carriage of the neck is totally unlike that of the Mute Swan. This and other Trumpeter Swans have the neck abruptly much thickened towards its lower portion, and the thickened part lies flat upon the back commonly, while the slender portion of the neck rises from the middle of the back and is carried erect. The Hooper never raises his wings and arches the neck like the Mute Swan: and when paddling along at full speed, nearly the whole neck is thrown flat backward, two or three inches of it only being carried erect; imparting a most characteristic appearance to the bird. This peculiar carriage, and the frequent plaintive but not unmusical cry, *Kuk-koo-koo*, render the living bird more conspicuously different from the Mute Swan, even than appears from comparison of dead specimens. Each has a grace of carriage of its own; and the poet Wordsworth, from familiar observation of the Hooper in the lake district, remarks that it as much excels a Thames Swan in elegance, as the latter excels a domestic Goose,—which however is more than we are disposed to accede to.

272. ANAS CRECCA. ('Teal.') Europe, Asia, Barbary; common in India.

273. ANAS PENELOPE. ('Wigeon.') Europe, Asia, N. Africa: common in India.

274. ANAS AMERICANA. ('American Wigeon.') Straggler from N. America.

275. SOMTAERIA MOLLISSIMA. ('Eider Duck.') Arctic regions chiefly.

276. SOMATERIA DISPAR. ('Steller's Western Duck.') Arctic regions, chiefly N. of Asia.

277. SOMATERIA SPECTABILIS. ('King Duck.') Arctic regions chiefly.

278. OIDEMIA FUSCA. ('Velvet Scoter.') Circuit of northern regions; Barbary.

279. OIDEMIA NIGRA. ('Common Scoter.') Europe, N. Asia, Barbary.

280. OIDEMIA PERSPICILLATA. ('Surf Scoter.') N. America chiefly, rare in Europe.

281. FULIGULA RUFINA. ('Red-crested Whistling Duck.') Europe, Asia, N. Africa: common in N. India; not rare in Lower Bengal, during the coldest part of the year.

282. FULIGULA FERINA. ('Pochard.') Circuit of northern regions, Barbary: common in India.

283. FULIGULA NYROCA. ('Ferruginous Duck.') Europe, Asia, N. Africa: common in India.

284. FULIGULA MARILA. ('Scaup Duck.') Circuit of northern regions: Punjab, Sindh, Nepal.

285. FULIGULA MARILOIDES. ('American Scaup.') Straggler from America.

286. FULIGULA CRISTATA. ('Tufted Duck.') Europe, Asia, Barbary: common in India.

287. HARELDA GLACIALIS. (*Fuligula glacialis*; 'Long-tailed Duck.') Circuit of northern regions, chiefly far north.

288. CLANGULA (?) HISTRIONICA.' (*Fuligula histrionica*; 'Harlequin Duck.') Circuit of northern regions, chiefly far north.

289 CLANGULA GLAUCION. (*Fuligula clangula*; 'Golden Eye.') Circuit of northern regions, N. Africa: Sindh, Punjab.

290. CLANGULA ALBEOLA. (*Fuligula albeola*; 'Buffel-headed Duck.') N. America chiefly, much rarer in Europe.

291. MERGELLUS ALBELLUS. (*Mergus albellus*; 'Smew') Circuit of northern regions; W. Asia, Sindh, Punjab, Oudh; apparently not rare along the Punjab rivers.

292. MERGUS CUCULLATUS. ('Hooded Merganser.') N. America chiefly, rare in Europe, or mostly confined to the far north.

293. MERGUS SERRATOR. ('Red-breasted Merganser.') Circuit of northern regions, Barbary.

294. MERGUS MERGANSER. ('Goosander.') Circuit of northern regions: not rare in the Himaláya; rare in Central India (*M. orientalis* of Gould.)

295. PODICEPS CRISTATUS. ('Great-crested Grebe.') Europe, Asia, all Africa, America; the Australian barely separable: Himaláya, Bengal Sunderbáns. Perhaps commoner than generally supposed in India, from its secluded habits and the great difficulty of procuring specimens.

296. PODICEPS RUBRICOLLIS. ('Red-necked Grebe.') Circuit of northern regions, W. Asia.

297. PODICEPS CORNUTUS. ('Sclavonian Grebe.') Circuit of northern regions, W. Asia.

298. PODICEPS AURITUS. ('Eared Grebe.') Circuit of northern regions, W. Asia, Barbary, Falkland Islands?

299. PODICEPS PHILIPPENSIS. (*P. minor;* 'Little Grebe.') Europe, Asia and its islands, N. Africa: very common in India.

300. COLYMBUS GLACIALIS. ('Great Northern Diver.') Circuit of northern regions.

301. COLYMBUS ARCTICUS. ('Black-throated Diver.') Circuit of northern regions.

302. COLYMBUS SEPTENTRIONALIS. ('Red-throated Diver.') Circuit of northern regions.

303. URIA TROILLE. ('Common Guillemot.') Circuit of northern regions.

304. URIA BRUNNICHII. ('Brunnich's Guillemot.') Circuit of northern regions, chiefly far north.

305. URIA RINGUIA. (*V. lachrymans;* 'Ringed Guillemot.') Circuit of northern regions? Spitzbergen, &c.

306. GRYLLE GRŒNLANDICA. (*Uria grylle;* 'Black Guillemot.') Circuit of northern regions.

307. ARCTICA ALLE. (*Mergulus melanoleucos;* 'Little Awk.') Circuit of northern regions, chiefly far north.

308. FRATERCULA ARCTICA. ('Puffin.') Circuit of northern regions.

309. UTAMANIA TORDA. (*Alca torda;* 'Razorbill.') Circuit of northern regions.

310. ALCA IMPENNIS. ('Great Awk.') Circuit of northern regions, chiefly far north.

311. PHALACROCORAX CARBO. ('Common Cormorant.') Circuit of northern regions, Barbary: common in the Himaláya; rare in Central India.

312. PHALACROCORAX GRACULUS. ('Shag.') Europe, Greenland, all Africa!

313. SULA ALBA. ('Gannet.') Circuit of northern regions. S. Africa.

The circumstance of a Pelican having been found dead upon the coast of Durham has already been noticed.

314. SYLOCHELIDON CASPIA. (*Sterna caspia:* Caspian Tern.') Warmer regions of the old World generally, Australia (*S. strenuus*, Gould): not rare in parts of India; but doubtful as occurring in Lower Bengal.

315. THALASSEUS BOYSII. (*Sterna Boysii;* Sandwich Tern.') Europe, Africa, and America.

316. STERNA PARADISEA. (*St. Dougalli;* 'Roseate Tern.') Europe, Asia, Africa, America, Australia: coasts of India.

317. STERNA HIRUNDO. ('Common Tern.') Europe, Asia, Africa: S. India, Ceylon.

318. STERNA ARCTICA. ('Arctic Tern.') N. Europe, America.

319. HYDROCHELIDON INDICA. ('*Sterna leucopariea;* 'Whiskered Tern.') Europe, Asia, Africa, Malay countries; very common in India.

320. GELOCHELIDON ANGLICA. (*Sterna* anglica; 'Gull-billed Tern.') Warmer regions of the Old World, extending also to America; Java: common in India.

321. STERNULA MINUTA. (*Sterna minuta;* 'Lesser Tern.') Northern hemisphere; replaced in S. America and Australia by nearly affined species: common on the west-coast, and in parts of S. India.

322. HYDROCHELIDON FISSIPES. (*Sterna fissipes;* 'Black Tern.') Europe, W. Asia, Africa; rare in N. and C. Europe,

323. HYDROCHELIDON LEUCOPTERA. (*Sterna leucoptera;* 'White-winged Tern.') Europe, N. Africa, Madeira, W. Asia.

324. ANOUS STOLIDA. (*Sterna stolida;* 'Noddy Tern.') Of general distribution, over the warmer parts of the ocean: common in the Indian seas.

325. ONYCHOPRION FULIGINOSUS. (*Sterna fuliginosa;* 'Sooty Tern.') Very generally distributed, like the last; Bay of Bengal.

326. XEMA SABINI. (*Larus Sabini;* 'Sabine's Gull.') Northern regions of America chiefly.

327. XEMA BONAPARTII. (*Larus Bonapartii;* 'Bonapartian Gull.') Straggler from America.

328. RHODOSTETHIA ROSSII. (*Larus Rossii;* 'Cuneate-tailed Gull.') High northern latitudes, chiefly.

329. XEMA MINUTA. (*Larus minutus;* 'Little Gull.') Europe, Siberia, Caspian.

230. XEMA CAPISTRATA. (*Larus capistratus;* 'Masked Gull.') Europe, N. America.

331. XEMA RIDIBUNDA. (*Larus ridibundus;* 'Black-headed Gull.') Europe, Asia, N. Africa: not rare in India, but less common than the nearly affined X. BRUNNEOCEPHALUS.

332. XEMA ATRICILLA. (*Larus atricilla;* 'Laughing Gull.') Straggler from N. America.

333. RISSA TRIDACTYLA. (*Larus tridactylus;* 'Kittywake.') Circuit of northern regions, Barbary, W. Asia.

334. LARUS EBURNEUS. ('Ivory Gull'.) Arctic regions chiefly.

335. LARUS CANUS. ('Common Gull.') Europe, W. Asia, (Caspian.)

336. LARUS ISLANDICUS. ('Iceland Gull.) Arctic regions chiefly.

337. LARUS FUSCUS. ('Lesser Black-backed Gull.') Atlantic, Mediterranean, Red Sea, Indian Ocean, Cape of G. Hope, N. Zealand, Kábul (Burnes), Bay of Bengal.

338. LARUS ARGENTATUS. ('Herring Gull.') Polar regions, Atlantic, Mediterranean, Euxine.
339. LARUS MARINUS. ('Great Black-backed Gull.') Northern Atlantic, Mediterranean, Caspian.
340. LARUS GLAUCUS. ('Glaucous Gull.' Arctic regions chiefly.
341. CATARRACTA SKUA. (*Lestris catarractes*; 'Common Skua.') Arctic and Antarctic (?) regions.
342. CATARRACTA POMARINA. (*Lestris pomarinus*; 'Pomarine Skua.') Arctic seas.
343. CATARRACTA PARASITICA. (*Lestris Richardsonii*; 'Richardson's Skua.') Northern seas.
344. CATARRACTA CEPHUS. (*Lestris Buffonii*; 'Buffon's Skua.') Northern seas.
345. PROCELLARIA GLACIALIS. ('Fulmar Petrel.') Arctic Ocean to latitude of Britain.
346. PROCELLARIA HŒSITATA. ('Capped Petrel.') Indian and southern oceans: a rare straggler in Britain, that has been obtained once only.
347. PUFFINUS MAJOR. ('Greater Sheerwater.') Northern regions.
348. PUFFINUS ANGLORUM. ('Manx Sheerwater.') Northern regions; stragglers occurring in the Mediterranean, Levant, &c.
349. PUFFINUS OBSCURUS. ('Dusky Petrel.') Tropical and S. Seas; Australia; rare northward.
350. THALASSIDROMA BULWERI. ('Bulwer's Petrel.') N. Africa, Madeira, Canaries.
351. THALASSIDROMA OCEANICA. (*Th. Wilsoni*; 'Wilson's Petrel') N. and S. Oceans.
352. THALASSIDROMA LEACHII. ('Fork-tailed Petrel.') N. Ocean.
353. THALASSIDROMA PELAGICA. ('Storm Petrel.') N. Atlantic.

Of the foregoing series of 353 species of birds admitted as British by Mr. Yarrell, the whole are figured by him, excepting the two (Nos. 25 and 327) introduced in his preface,—the occurrence of them within the British islands having been ascertained too late for pictorial representation. The circumstance of a Pelican being found dead upon the coast of Durham has since been recorded; though such a bird is not unlikely to have escaped from confinement: on the other hand, Pelicans of two species are far from being rare in the S. E. countries of Europe; and one of them *(Pelicanus onocrotalus)* has several times occurred wild in France; this, also, is an Indian bird of rare occurrence,* being chiefly African, while two other species of Pelican are common in India. There is also the case recorded by W. Gould of the Spiny-tailed

* There is a specimen in the museum of the Asiatic Society, Calcutta, which was killed near Dacca.

Swift *(Acanthylis caudacuta)*: besides which, as before remarked, it is not shewn upon what grounds the Bimaculated Duck *(Anas bimaculata*)* is rejected from the present edition; especially as this bird of northern Asia has several times been killed in France, and specimens of it have been obtained in the London markets, which were at least as *probably* from the British fens as from the Low Countries; and it being, therefore, a most likely bird to make its appearance sometimes, however rarely, on the British side of the Channel and German Ocean. The *Nycticorax cayannensis* was admitted in Mr. Yarrell's first edition, upon the authority of a specimen killed near Yarmouth in Norfolk; but this too is now rejected, perhaps on the unlikely supposition (of Prof. Schlegel) that it might have escaped from captivity.

About twenty-six species, as we have seen, of those admitted are stragglers from the American side of the Atlantic; with No. 174, which is an American species introduced by man: and besides these, some eight or nine other American species of birds have been admitted, upon evidence more or less satisfactory, as stragglers upon the continent of Europe; such are—*Haliaetus leucocephalus* (not particularly well authenticated), *Merula migratoria* and *Turdus solitarius* (vel *minor*), *Totanus* (vel *Catoptrophorus*) *semipalmatus*, *Himantopus nigricollis* (in Corfu), and *Ardea herodias* (?), *Anser hyperboreus*, *Anas* (*Dendronessa*) *sponsa*, and *Fuligula rufitorques* (in England, *apud* Schlegel.) *Turdus auroreus* of Pallas, described by that great naturalist as inhabiting the island of Kadick, on the W. coast of N. America, has several times been killed in Germany, according to Prof. Schlegel; although a re-examination of the specimens (particularly one obtained in Silesia) he still thinks to be necessary.

Other species included by Mr. Yarrell belong properly to the Polar regions; whence, if migratory, they rarely attain to so low a parallel as even the northernmost parts of Britain. Such are—the Gyr Falcon and the Snowy Owl, the Hawk Owl; and among *Insessores* the *Lanius excubitor*, *Oticorys alpestris*, and *Centrophanes lapponicus*; with numerous aquatic birds, and the diminutive *Lobipes hyperboreus* (a wader of natant propensities). Some are common in Scandinavia, however rare in Britain; as the Great Black Woodpecker, Nutcracker, Parrot Crossbill, Pine Grosbeak, &c.: while others pay irregular visits (there is reason to believe) from the wood-clad regions of Siberia; as especially the *Ampelis garrulus*, and perhaps *Loxia bifasciata*. Others,

* Erroneously identified by Mr. Yarrell and others with *A. glocitans*, which is a synonyme of *A. formosa* (another beautiful Duck of N. E. Asia, which we once procured in the Calcutta provision-bazar): and, as a result of this mal-identification, *A. formosa* in addition to *A. bimaculata* has found its way into some of the catalogues of the birds observed in Europe.

again, stray occasionally from their proper home in Africa ; being migrants to a greater or less extent, which, however, seldom advance to a higher latitude than Spain; such are *Oxylophus glandarius*, *Erythropygia galactotes*, *Turnix andalusica*, *Cursorius isabellinus*, *Glareola torquata*,—and even some as yet unobserved in the Spanish peninsula, as *Pycnonotus auriventer* and *Plectropterus gambensis*. Certain of those African stragglers extend their habitual range far into Asia, as *Neophron percnopterus*, *Merops apiaster*, and *Coracias garrula*. Some again are tolerably common in proximate or parallel regions of the European continent (even on the opposite shore of the British channel, as *Galerida cristata)*, which nevertheless are comparatively very rare in Britain, *e. g.* the Hoopoe, Oriole, and Woodchat Shrike.* A few appear to be wanderers from the high mountains of Central and S. Europe ; as *Gyps fulvus*, *Accentor alpinus*, if not also *Cypselus melba ;* and, again, among the oceanic birds, there are stragglers from the parallel of Madeira, as *Thalassidroma Bulweri*, or even far southern latitudes, as *Puffinus obscurus* and especially *Procellaria hæsitata*. M. Degland even includes, in his 'Ornithologie Europeénne,' two species of Albatross proper to the southern hemisphere, upon the authority of specimens having been captured upon the coasts of France and of Norway.

Not a few of the common British species of birds range eastward to Afghânistán in the direction of India, but there stop (so far as observed hitherto), or at most have found their way no further than the Pesháwur valley and its vicinity ; being likewise inhabitants of Kashmir, for the most part: such are the Carrion and Hooded Crows, the Rook, and the Jackdaw,—also, as a remarkable instance, from its great power of wing, the common Swift of Europe, *Cypselus apus:* the *Pterocles alchata* seems to find the same eastern limit ; while other desert birds, as *Certhilauda desertorum* and *Ammomanes lusitanica*, are diffused from Spain and N. Africa to the deserts of N. W. India: the European Roller and Bee-eater inhabit Sindh and the Punjab; and the British Wheatear is a winter visitant over much of Upper India: again, the Landrail is common in Afghânistán, though hardly known on the Indian side of the Passes; and the European Little Bustard is not uncommon in the Pesháwur valley :† while, as we have seen, the Houbara Bustard of Sindh and Afghânistán finds its way occasionally even to the westernmost parts of Europe.

* On the other hand, certain small land-birds are permanently resident in the southernmost parts of Britain, which on the continent scarcely inhabit so far to the northward ; as *Melizophilus provincialis* and *Emberiza cirlus.*

† In Afghânistán, *Passer salicarius* and *Petronia stulta* are common, if not also *Sitta syriaca ;* the second of these visiting Pesháwur and Kohát. *Loxia curvirostra* has also been observed numerously in Afghânistán.

Thus far, little or no doubt exists respecting the precise determination of species: but, in attempting a statistical summary of the conclusions to be deduced regarding the extent of the occurrence of British species of birds in India, that difficulty at once presents itself, arising from the various shades of opinion entertained by different naturalists concerning the identity or non-identity of certain species, as observed in the British islands and in India. Thus, while disregarding the laborious efforts of such transcendental *hair-splitters* as the Pastor Brehm and the Chevalier Raffinesque (the "eccentric naturalist" of Audubon), or merely cursorily alluding to them, we find that Mr. Gould (as before remarked) recognises as distinct the Peregrine Falcons, common Quails, and Goosanders of the two regions; while, to take the opposite extreme (also before cited), Prof. Schlegel considers—or did formerly consider—"the Himaláyan Jay" to be a mere "climatal variety" of the European *Garrulus glandarius*. In this dilemma, we might select the disputed cases, and proceed to "split the difference" by admitting half of them; but it will be more satisfactory to treat of the entire series in the following manner.

Of the birds of prey, Mr. Yarrell admits 33 species, of which exactly two-thirds are diurnal, and one-third nocturnal. Of the 22 diurnal, six only are inadmissible into the Indian *fauna*, according to present knowledge; the *Pernis* being (provisionally at least) admitted. Of those six, the *Nauclerus* is a straggler from America; and the Jer Falcon is an Arctic bird, though apparently the *Shangur* of Indian falconry. The Rough-legged Buzzard also is a northern bird, as regards Britain, seen only in winter or at the times of passage. There remain the Merlin, which may be expected yet to prove a winter visitant in the Punjab,—the common European Kite,—and the White-tailed Sea-eagle. The Peregrine Falcon is the only species respecting which doubt has been expressed, of its absolute identity in India and the British islands. Of eleven nocturnal species, *Scops asio* is an undoubted straggler from America: the great Snowy Owl is Arctic; and such, or at least sub-arctic, must be considered the *Surnia funerea* and *Nyctale Tengmalmi*: *Scops Aldrovandi* and *Athene psilodactyla* may be regarded as summer visitants only, wintering further south; like the Hobby, Pern or 'Honey Buzzard,' and one or two others among the *Falconidæ*. Three only are certainly identical in the two regions,—of which *Athene psilodactyla* is peculiar in India to the extreme N. W., with Afghânistán; and, so far as the Algerian variety is at all appreciable as such, seems to be identical with it;—the *Asio otus* is confined in India to the Himaláya,—and the *A. brachyotus* is, in this country as elsewhere, migratory in considerable flocks, visiting the plains during the cold season. *Syrnium aluco*, however, is barely separable from

S. nivicolum of the Himaláya; and *Scops Aldrovandi* approximates very closely to *Sc. bakkamœna*: while *Bubo maximus* is likely to occur in the Alpine Punjab. Certain other species of diurnal birds of prey, which are common in India, extend more or less over the European continent, but do not occur in Britain.

Of the *Insessorial* tribes, Mr. Yarrell includes 127 species; of which we may reckon 34 as having been observed in India. Of the others, 5 are wanderers from America (Nos. 125, 126, 149, 153, and 157), and 2 may be regarded as Arctic (Nos. 96 and 101); while the *Reguloides proregulus*, common in India, is perhaps as rare in the west as *Turdus pilaris* is in the Himaláya. The disputed cases are *Turdus viscivorus*, *Passer domesticus*, and may be one or two others,—*Pratincola rubicola* for instance, and even *Hirundo rustica* (of which we acknowledge one and not the other.) Certain other species of S. Europe might be added to the list, as especially the pretty little Wall Creeper (*Tichodroma phœnicoptera*,) which is very common, fluttering like a butterfly (as Mr. Vigne remarks,) on the face of the Himaláyan precipices.

Of Pigeons, Mr. Yarrell includes five species only, one of them being a straggler from America. The four others have representatives or counterparts in India, more or less strongly distinguished, as already noticed; and perhaps so nearly akin that the races inhabiting the two regions would blend, if circumstances permitted of it, at least in two or more instances, as *Columba intermedia* with *C. livia*, and *Palumbus casiotis* with *P. torquatus*.

Of gallinaceous birds, 11 species are made out by Mr. Yarrell: but they include the Pheasant (introduced from W. Asia,) two kinds of Red-legged Partridge (also introduced species,) and the N. American *Ortyx virginiana!* Also a little straggler from the south, the *Turnix andalusica*, upon the authority of a single pair having been obtained. There remain two species of Grouse (one of which, having been extirpated, has been restored from Norway,) two also of Ptarmigan, the Grey Partridge, and the common Quail. The Grouse and Ptarmigan have no representatives in the Himaláya; but the European Grey Partridge has a remarkable counterpart or immediate congener in Tibet; and with respect to the Quail, which Mr. Gould regards as different from the Indian Quail, Mr. Yarrell remarks that—"I have carefully examined and compared specimens from China, India, the Cape of Good Hope, and England; and must pronounce them, in spite of the extraordinary geographical range, to be one species: the differences between the specimens not being greater than are found amongst individuals from the same locality."

Of the waders (so called, though comprising many genera of non-wading habits,) Mr. Yarrell admits 74 species, of which at

least 52 (or nearly three-fourths) are common to the two regions; including of course the stragglers on either side. Of the remaining 22, just half are wanderers from America; and the residue are *Otis tarda*, *Cursorius isabellinus* (African,) *Glareola torquata* (African, but not well distinguished from *Gl. orientalis*,) *Pluvialis apricarius*, *Charadrius hiaticula*, *Ardeola comata* (replaced by *A. leucoptera*,) *Scolopax major*, *Sc. Sabini*, *Limosa rufa*, *Tringa maritima*, and *Rallus aquaticus*. *Limosa rufa* is stated by Temminck to occur in Java and Timor; and there may be difference of opinion about separating *Rallus indicus* from *R. aquaticus*. Another contested case is the identity of the 'Great White Egret,' which is here assumed; this being an exceedingly rare bird in Britain, as are also the two other Egrets admitted by Mr. Yarrell.

Lastly, of the web-footed tribes, Mr. Yarrell admits 103 species, of which 34 are common to the two regions. Of the latter number, 20 appertain to the *Anatidæ* or Duck family, and 8 to the series of Terns; the remaining 5 consisting of two Gulls, a Cormorant, and two Grebes (one of the latter not uncontested as identical.) There is of course no Indian representative of the *Alcadæ*, or Awk family of northern regions; nor is there of the Loons (*Colymbus;*) neither has any Petrel as yet been identified in the Indian seas, though at least one small species has been repeatedly seen (in boisterous weather) in the Bay of Bengal. Of the *Anatidæ*, the Swans are represented only by a single instance of one having been obtained in the valley of Nepal; and of 3 Geese, one only (*Anser cinereus*) is common, a second (*A. brachyrhynchus*) is identified from one of a series of coloured drawings of birds made in the Punjab,—and the third (*Bernicla ruficollis*) we recognised from an unmistakeable description of a specimen killed in Upper Hindustán, it being undoubtedly of extreme rarity. The Goosander and the Smew represent the Mergansers (albeit the identity of the former with the European bird has been questioned;) and, of the remaining *Anatidæ*, the Sea Ducks are only represented by *Clangula glaucion* in the N. W. of India, while the ordinary Ducks comprise 9 species which are common to the two regions, and the Pochards comprise as many as 6 species.

The details into which we have been led will, it is hoped, render Mr. Yarrell's 'History of British birds' a very useful work of reference to the student of Ornithology in this country: and, as it is desirable to indicate the chief authorities which have been consulted in the course of this essay, more especially in tracing the geographical range of species, we now, by way of conclusion, subjoin them:—

'*Proceedings of the Zoological Society*.' London. From 1830-31.

'*The Annals and Magazine of Natural History*,' *from January*, 1842. London.

'*Revue Zoologique par la Société Cuvierienne*;' *from January*, 1838. Paris.

'*Journal of the Asiatic Society of Bengal*,' *from* 1832. Calcutta. (Comprising numerous ornithological memoirs, &c.)

'*The Madras Journal of Literature and Science*.' Vols. X. XI., XII., XIII., (1839 to 1844.) Madras.

'*Catalogue of the Birds in the Museum of the Asiatic Society*.' Calcutta. 1852.

'*A Catalogue of the Birds in the Museum of the Hon'ble East India Company*.' Vol. I., 1854. Additional portion received, as far as p. 649.

'*A Catalogue of the Specimens and Drawings of Mammalia and Birds of Nepal and Tibet, presented by B. H. Hodgson, Esq., to the British Museum*.' London, 1846.

'*Comptes Rendus Hebdomedaires des Sciences de l'Académie des Sciences*.' *4to. Paris. Tome XXXVII* (1853,) *et seq.; containing many valuable Ornithological Notices and Memoirs*, by *S. A. I.* C. L. Bonaparte, Prince de Canino et Musignáno. Paris.

'*Catalogo Ornitologico del Gruppo di Malta*,' da Antonio Schembri, *&c. &c.* Malta, 1843.

'*Quadra Geografico-Ornitologico ossia Quadro Comparativo le Ornitologie di Malta, Sicilia, Roma, Toscana, Liguria, Nizza, e la provincia di Gard*,' compilato da Antonio Schembri. Malta. 181—?*

'*Systematische Uëbersicht der Vögel Nord-Ost-Afrikas, nebst Abbildung und Beschreibung von Fünfzig Theils Unbekannten, theils noch nicht Bildlich Darjestellten Arten*.' Von Dr. Eduard Ruppell. Frankfurt A. M. 1845.

'*Voyage d'Orenbourg a Boukhara, fait in* 1820, *a travers les Steppes qui s'etendent a l'est de la Mer d'Aral et au-dela de l'Ancien Jaxartes*;' Redigé par M. le Baron Georges de Meyendorff, &c., &c., et revu par M. le Chevalier Amadee Jaubert. Paris. 1826. Oiseaux, p. 503 *et seq.*

'*Addenda ad celeberrimi Pallasii soographiam Rosso-Asiaticam*.' Auctore Dre Eduardo Eversmann *Fasciculus II. Casani.* 1841.

* Date erased in our copy.

ART. VIII.—1. *The Darjeeling Guide.*

2. *Records of the Bengal Government.* No. XVII.

3. *Indian Annals of Medical Science.* No. VII.

4. *Agra Guide.* Vol. II., 1841.

5. *Hooker's Himmalaya Journals.*

IT is a singular fact that the Darjeeling hills were, for many years after the British obtained a footing in Bengal, a *terra incognita* to the Christian people resident in the plains in their immediate vicinity. Scorched by the burning sun, saturated by the heavy rains, and debilitated by the insalubrious climate of the lowlands, the Christian inhabitants of the Zillahs Purneah, Dinagepur, Rungpur and Malda, lived within sight of the forest-clad hills and snowy peaks of the Himmalaya range, with scarcely a thought that they might be a refuge from the sultry heat and pestilential malaria of the lowlands in which they vegetated. The idea that this beautiful range of country might be turned to sanitary and other useful purposes did at length suggest itself to those who were interested, not only in the well being of those who dwelt in their immediate vicinity, but for invalids resident, generally, in Bengal and Behar. The thought once suggested was, as soon as official routine would permit, reduced to practice. The sickly Terai was passed, the mountains were scaled, and the district surveyed by intelligent and enterprising men.

The advantages offered by Darjeeling as a Sanatarium and a Military station were frequently brought to the notice of Lord William Bentinck. The first official report on the subject was presented by Colonel, now General, Lloyd; the report was favorably received by the Government. Next to General Lloyd, Mr. Grant of the Civil Service was one of the most zealous advocates of Darjeeling as a station. Owing to the reports of General Lloyd, Mr. Grant and others, the Governor General appointed Major Herbert, the Surveyor General, and Mr. Grant, to visit and report on the general capabilities, and on the eligibility of the Sikkim mountains as a Military station and Sanatarium. The report of these gentlemen was highly favorable to the district, both for military and sanitary purposes.

The Darjeeling hills formed originally a part of the territory of the Rajah of Sikkim, a hill chieftain, whose capital lies contiguous to the Nepal country, and on the high road from Darjeeling to Thibet. This mountain chieftain had been driven from his country by the Ghorkas, the warriors of Nepal. When the affairs of Nepal were adjusted, the British Government replaced the Sikkim Rajah

on his throne, and guaranteed to him the sovereignty of his territory. The principal object which the British Government had in view in this arrangement, was to make the Sikkim country a post of defence between Nepal, Bhotan and the whole Himmalaya eastward to the borders of Burmah, to prevent the marauding Nepalese from extending their conquests in the mountain countries between Nepal and the empire of the Golden Foot. Notwithstanding the importance of the locality in a military point of view, Darjeeling and its claims were held in apparent abeyance from 1817 to 1828. A frontier dispute between the Lepchas, the aborigines of the Darjeeling hills, and the Nepalese, brought the subject once more prominently into notice. The dispute, according to the terms of a treaty entered into by the British Government, the Nepalese and the Rajah of Sikkim, was referred to the Government of India. While this matter was under consideration, Mr. Grant visited the hills, and pointed out to Lord William Bentinck the eligibility of the locality as a Sanatarium. The issue of his recommendation was the appointment of the commission to which reference has already been made. The various reports on the subject had in the meantime been forwarded to the Court of Directors. The authorities in Leadenhall Street looked with a favorable eye on "the Bright Spot," and suggested the propriety of making the new settlement a depôt for European recruits, as well as a military station and sanatarium.

The Government of India, on the receipt of these instructions, at once took measures for securing a locality in the Sikkim hills. Application was made to the Rajah of Sikkim to cede a tract of country in which Darjeeling should be included, and for which an equivalent should be given. The terms at first proposed by the Rajah were exorbitant. He ultimately agreed to surrender the Darjeeling range, receiving from the British Government, in return for the ceded district, £300 per annum.

General Lloyd and Dr. Chapman were then despatched to visit the hills, to report on the most eligible locality for the new station. They selected Darjeeling, and the history of the settlement has proved the wisdom of their choice. In 1840, Dr. Campbell, then holding office at Nepal, was appointed Superintendent of the Darjeeling territory. He was also entrusted with the charge of the political relations between the British Government and the Sikkim Rajah.

The arrangements entered into between the British Government and the Sikkim chieftain went on harmoniously for the first few years. The Rajah was somewhat of an ascetic, and left political affairs in the hands of his Dewan or prime minister. The Dewan acted strictly in accordance with the spirit of the treaty entered into between the two Governments. He was succeeded by a man of a different temper—a Tibetan, a re-

lative of the Rajah's wife, an insolent and avaracious man, whose object was to monopolize the trade of the country and to aggrandize himself. Every thing and person British was tabooed, and every impediment which a Chinese nature could present to friendly intercourse between the two countries was thrown in the way. The British Government and the Resident at Darjeeling met this conduct of the Dewan either with neglect or forbearance. This conciliatory conduct was misinterpreted by the prime minister. He mistook forbearance and neglect for weakness and fear: and like all narrow-minded men became bold through the forbearance of those with whom he had to deal. His conduct at length reached its climax, and terminated fatally for the territorial and pecuniary interests of his master. Dr. Campbell, the resident at Darjeeling, while travelling through the Sikkim country, was seized by order of the Dewan. He was imprisoned, and during his imprisonment suffered such indignities as petty tyrants know how to inflict. Troops were despatched, the Resident was liberated, the Rajah's pension ceased, and a part of his territory, the Morung, was resumed by the British Government. All friendly relations, as a matter of course, ceased between the British and the Sikkim authorities; Sikkim was a sealed country to the former, and ceased to be the high road for commerce between Darjeeling and Thibet. This state of things continues up to the present time, though hopes are entertained that amicable relations may shortly be resumed between the two countries—a pension to the present Rajah looms in the distance, and is a ground of hope of a better state of things in that part of our eastern frontier. The old Rajah has retired to a Lama monastery; his son and successor is favorable to the British, but the Dewan still lives. His influence is great, and is the chief obstacle to friendly relations being entered into between the British Government and that of Sikkim.

The foundation of the station at Darjeeling having been laid, it steadily progressed. To the amiable and enterprising conduct of Dr. Campbell, the first Superintendent, may be traced the prosperity of the station and territory. That others have contributed to the present improved state of the district cannot be denied; but to Dr. Campbell the palm must be yielded. He watched over the territory with parental anxiety, it was in his heart that it should prosper. His object was to inspire the Aborigines with confidence in the British rule, to induce the neighbouring tribes to settle in the territory, and to render Darjeeling a commercial centre for traders from the countries round about, extending even to Thibet. That he has to a great extent succeeded in obtaining settlers, is evident from the large tracts of land which have been cleared of dense forest jungle, and that his commercial hopes

had begun to be realized, before the rupture with Sikkim, the Darjeeling bazaar and the fair at Titalya, at the foot of the hills, amply prove.

Darjeeling, as will have been gathered from the brief history now given, is situated in the Sikkim hills. The name is applicable both to the Station and to the Territory. The word Darjeeling has been variously interpreted. The popular interpretation appears to be "The Holy or Bright Spot." The territory is bounded to the north by the river Raman, which divides it from Sikkim; on the east by the rivers Runjeet and Teesta, these divide it from Bhotan; on the west the river Mechi divides it from Nepal; from the source of the Mechi northward the ridge of the Tongloo and Phullat mountains, conveys the western boundary north to the River Raman. The Zillahs Rungpur and Purneah are contiguous to its Southern or Terai boundary. The territory may be divided into two sections, the northern and southern. The northern consists of a succession of mountain and valley, with an average altitude above the sea level of from 4,000 to 9,000 feet; the Southern or Morung country consists of the skirts of the first range of the Himmalaya, and the plains between that region and the Zillahs of Rungpur and Purneah. The station of Darjeeling is situate in Lat. 27° 2′ 53″ N., Long. 88° 18′ 41″ E. It is a spur of the second range of the mountains of Sikkim. The spur trends in a northerly direction. It is shut in from the plains, and is sheltered from the winds and mists, which ascend from the lower districts, by two ranges of hills or natural screens, and to this provision of nature may be traced its comparative freedom from the mists and rains to which the outer ranges are subject. It is about thirty miles from the foot of the hills by the road, and fifteen in a straight line. Its elevation above the sea level is 7,165 feet. The ridge on which it stands varies in height from 6,000 to 7,600 feet; 8,000 feet being the elevation at which the mean temperature most nearly coincides with that of London. It is sheltered on the east by the Sinchal mountain, which rises to nearly 9,000 feet, and from whose summit a distant view of the plains may be seen, early in the morning, on a clear day.

The ridge on which Darjeeling stands, like most of the spurs in the Himmalaya, is generally narrow, or what is termed hog backed. It has a steep descent on its eastern side, which runs down to the torrent stream of the Rungnoo. The views presented on this side of the ridge, are, on a favorable day, most exciting. Mountain and valley stretch away as far as the eye can reach, until they merge in the snowy range, which in every varying form trends to the east for upwards of sixty miles. The murmuring waters of the Rungnoo make sweet and fitting music to such a scene. On the western side, the ridge declines in more gentle

declivities, a kind of terraced slopes, intersected by numerous mountain streamlets, the whole forming a picturesque amphitheatre two or three miles in circumference. The station viewed from the more artistic points forms a pleasing *coup d'œil*. The Swiss-cottage-like houses, perched on commanding knolls or nestling under sheltering hills, with their well-trimmed gardens, the bazar and sepoy lines, the village church on the hill, the cutcherry, the ruined Llama temple, with the wide-spread valley clothed with luxuriant forest foliage and verdant crops, and flowers of every form and hue, with here and there a silvery mountain stream, give it the appearance, on a calm summer's eve, of

> "A spot enclosed by God,
> Out of the world's wild wilderness."

This sylvan refuge for the weary residents of the plains, is distant from the Metropolis of British India, our busy, reeking Calcutta, 371 miles.

There are in Darjeeling some seventy houses, and a Christian population, including children, the invalids, and the Depot establishment, of upwards of two hundred. In the season this number is considerably augmented. There are in the station the following public buildings and institutions. The Invalid Establishment for sick soldiers of Her Majesty's and the Hon'ble Company's services. There are usually about one hundred and fifty invalids at the Depot. They are under the charge of a Commandant and a small body of officers. There is a military officer and an apothecary attached to the Depot. The establishment is on the Jellahapahar, the highest point in the station. It is the first object which arrests the attention of the visitor on his entrance into the station. At the other extremity of the station stands the Episcopal Church, a neat and simple structure; near it is the Cutcherry, under its roof all the official business of the station is transacted. The Treasury is here also. Lower down are the Assembly and Reading rooms. Below this again is the Baptist Chapel, and still further down the Jail. One Hindu temple stands near the Bazar, and a small house fitted up as a Mosque is in the same vicinity. The Government school is in the same locality. In a retired nook on a lower elevation stands the Roman Catholic Nunnery and Chapel. There is a Roman Catholic Chapel also at the Jellahapar for the invalid Roman Catholic soldiers. The Bazar and the Sepoy lines are on a cleared spot in the centre of the station. The bazar is upon the whole well arranged, and tolerably well supplied. The Bunneahs are all from the plains. The shops have been erected by, and are the property of, the Government. The authorities however do not interfere with the prices of things sold in the bazar. Trade is quite free, and every encourage-

ment has been given to tradesmen to settle at the station. The Lepcha bazar needs improvement. It is ill built and dirty; this is however quite in accordance with Lepcha taste. The officials in Darjeeling are not numerous. The Superintendent is the sole ruler of the station and territory, except in certain Criminal Cases, when the Judge from Dinagepore officiates. Assessors are sometimes appointed. The Judge is not however bound by their decision, they are merely selected with a view to give the Superintendent or Judge the benefit of their local experience. There is a resident officer attached to the Sapper corps; he has charge of the roads and other matters which call for the skill of the engineer. A Civil doctor resides in the station. A chaplain is appointed by Government to officiate in the Church and to the invalids at Jellapahar. He is appointed for two years. There is a Baptist Missionary, connected with the Mission established by the Rev. W. Start; he labours chiefly amongst the Lepchas. A School Master has been recently appointed to the Government school, and there is a Teacher for the children of the invalids at the Military Sanatarium.

The prosperity of the station has called into existence, besides the native shops in the Bazar, European shopkeepers, butchers and gardeners; and one small Tavern, or, as it is termed, a dak bungalow. A good Hotel is needed at Darjeeling. Parties have commenced Taverns; but hitherto they have not succeeded. As the station progresses, and the number of casual visitors increases, there will be a better prospect for any one entering on such a speculation.

In presenting an account of Darjeeling we cannot omit to mention some by whose enterprise the station has been helped into prosperity. Amongst others may be mentioned General Lloyd, S. Smith, B. Hodgson and D. Wilson, Esqrs., Sir Thomas Turton, Mr. Lowe, Col. Crommelin, Dr. Withecombe, Capts. Masson, Cornish and Murray, and Mr. Martin. There are others of whom we doubt not honorable mention might be made, were we more familiar with the details of the history of Darjeeling. Amongst the florists, General Harvey with his garden of beautiful flowers deserves notice.

The approaches to Darjeeling are full of beauty and interest to the traveller. Having left the scorching plains of Bengal, the first change which the visitor experiences is the Terai or belt of dense forest jungle, which skirts the base of the Himalaya. This though beautiful is no paradise. It is most unhealthy, and notwithstanding the partial clearings, is deemed an unsafe spot for a stranger to pass the night in. To sleep in the Terai is generally equivalent to "gaining a loss" in the shape of jungle fever. The unhealthiness of this hot-bed of disease, arises from the want of drainage. The waters from the hills find no free passage,

they are pent up by the massy jungle, and either percolate the gravel beds or are carried off by evaporation. The want of circulation, owing to the proximity of the mountains, and the amount of malarious vapour ever hanging over the district, as well as the sources already adverted to, sufficiently account for the unhealthiness of the Terai. Cultivation and good drainage will doubtless tend very materially to change this nest of fever into a comparatively healthy district. In the mean time we may suggest the almost certain means of avoiding the evils of the Terai. Let the journey through it be made in the morning from seven to ten, and the chances are that no injurious effects will be experienced. In the season of 1856, parties traversed the Terai during the whole season, in palkies, on elephants, on horseback, and by carts; and, as far as Christians were concerned, in every instance, with impunity. The Terai is inhabited by the Mechis, a squalid and unhealthy-looking race; their companions are tigers, wild elephants and bears, fitting residents for such a region. In passing through the Terai, the bed of the Mahanuddi is passed. Having passed this mountain stream, the ascent is gradual through a district rich in natural scenery. Crossing a rustic bridge, and traversing a long picturesque mountain road, the first puffs of a cooler atmosphere begin to be felt. At the termination of this road the ascent becomes abrupt, and we have reached the first step in the Himalaya ladder. On a small knoll at the head of the ascent we reach Punkabarria, the first station in the hills. It is 2,500 feet above the sea level.

The India Rubber tree (Ficus Elasticus) is to be found here, as well as in the valleys higher up on the same level. This Dr. Hooker states is the western limit of this plant.

The next stage is from Punkabarria to Kursion. The rise from the first to the second station is very abrupt. The road is however so constituted as to render the ascent comparatively easy. The journey from Punkabarria to Kursion is most enchanting.

The soil and its productions are completely new. The soil is mica and clay slate, the former, says Hooker, being full of garnets. A noble forest replaces the stinted and bushy vegetation of the Terai. The passage through this region in the spring is a treat even to the residents, much more to the weary traveller from the plains. It is like passing through the vast, well-wooded park of some feudal lord. Lofty mountains rise on every side, covered from the base to the summit with magnificent forests, their offspring of orchids, vines and climbers being interlaced in most fantastic forms. The sides of the road are covered with a rich variety of ferns and flowers, while here and there a mountain stream gives out its music to aid the few song-birds who chaunt sweet notes in shady groves.

Ascending, open spots give artistic views of the vast plains,

which stretch out from the base of the mountains to the horzion, "like the smooth surface of a summer's sea." The distance from Punkabarria to Kursion is six miles: owing, however, to the abruptness of the ascent, it takes about two hours to reach the second station. Kursion is one of the gems of the Sikkim hills, and will in time, we doubt not, become a station of importance. It is situated on a large ridge or spur, through which the high road to Darjeeling passes. Its elevation is 5,200 feet above the sea level. The view from the Eagle's Crag, a bold, rocky eminence, is most extensive and picturesque. The broad plains of Purneah, Dinagepur, Rungpur and Malda, with their dense forests and verdant crops, intersected by the silver streams of the Mechi, Mahanadi, Teesta, the Brahamputur, and on a very clear day, the great Ganges, are seen stretching out as far as the eye can reach to the South and East. To the North Kinchijunga and his companions raise their icy peaks, while immediately in the vicinity lofty mountains and deep valleys, clothed with everlasting spring, encircle you on every side. The zephyr-like breezes wafted up from the plains, come laden with the rich perfumes of sweet scented flowers, and clouds, of which Kursion appears to be the laboratory, rise up in most fantastic forms. Kursion boasts its water-fall, which during the rains is an object of great attraction. The climate of Kursion is not unlike that of Nice, with this exception, that during the rains it is necessarily damper. Medical men give the preference to Kursion for patients suffering from pulmonary affections.

The next stage is from Kursion to Chuttuckpur. The rise is abrupt for three or four miles, when it becomes more easy till you reach the third bungalow. The scenery is much the same as below. Nature, ever varying, changes her dress as we ascend, new varieties in the floral and arborial world make their appearance, and the atmosphere becomes sensibly cooler. The weariness of the plains is exchanged for the elasticity of the mountains. The whole system becomes invigorated, the appetite sharpened, and the spirits more exuberant.

Chuttuckpur lies like a nest in the side of a lofty mountain. It is generally in the clouds, and is on that account a damp and not over-comfortable bungalow. It is, however, a welcome rest-house to the mountain traveller. The road from Chuttuckpur to Darjeeling is, until you come within a short distance of "the Bright Spot," almost a level. The scenery is bold, the road passing through lofty mountains and majestic forest trees. The mountain streams are more impetuous, the air cool and refreshing.

On the road to Darjeeling, and about midway between Chuttuckpur and the central station, is Sanadah, a village and a resting

place for troops. On a spur descending from this station is the new settlement of Hope Town. This station was only commenced at the close of the rainy season of 1856. It owes its existence to the enterprise of two or three gentlemen from the plains. Their object is to make it a settlement for residents. The cleared land has been purchased from the natives. The proprietors have no wish to make a profit by the re-sale of the land, their object being to induce people to become settlers, and to develope the resources of the country. The location has been surveyed and marked out in lots of from one hundred to five hundred acres, with building plots. A Tea Company has been formed in connexion with the Hope Town settlement. A portion of the profits of the sale of land is to be appropriated to the erection of a place of worship,—unsectarian,—a school house, a dispensary and a bazar. The greater portion of the land has been taken, three houses are nearly erected, and others will soon be commenced; a road has been made from the main road down to the Balasun, and all the shares, and more than were originally issued, of the Tea Company, have been taken up. We shall watch with interest this attempt to form a Colony of Himmalaya farmers in the Darjeeling territory: and from what we know of the men who have started it, we have little doubt of its success. Retracing our steps we pass on to Darjeeling. The immediate approach to it is steep, the top of the Jellapahar has to be attained before we can see "the Bright Spot." Having reached the top of the Himalaya Pisgah the station is in full view, and well repays the toil of the wearisome journey, the accidents by flood and field, by plain and valley and mountain.

The natural scenery of the Darjeeling territory is full of interest to the admirer of nature and the man of science. From the Jellapahar, the highest point in the station, the views on every side are pregnant with grandeur and beauty. To the south the landscape is a succession of mountain and valley, covered from the base of the mountains to their loftiest peaks with the most luxuriant forest foliage. To the east the Sinchul raises its lofty head, covered with the sweet-scented magnolia, and with a forest of richly hued rhododendra. To the north, the mountains of the lower range of the Himmalaya, like massive mountain billows, rise one over the other covered with eternal spring, till they merge in the snowy range; while in the distance Kinchijunga, the monarch of mountains, raises his silver crested peaks high even above his aspiring companions. To the west rises Tougloo and Phullot. Abrupt slopes, deep ravines, cleared patches and mountain streams, encircled by lofty mountains, make up a picture which, when lit up by the rays of the rising or the setting sun, can have few if any rivals. Nor must we omit the

cloud scenery of this beautiful region. Here the clouds are seen in all their perfection, assuming every imaginable form, and tinged with ever varying hues.

> Their ever-changing forms and shapes
> By rainbow hues adorned,
> Seem oft as if by heavenly skill
> For angels' chariots formed.

Nor is their beauty diminished by the dark outlines of the mountains on which they cast their airy shadows. The lover of nature can desire no view more entrancing than this land-locked Sanatarium, either at sunrise or by moonlight. Both are calculated to stir the poet's muse, or to inspire the artist with a desire to give, in mimic form, the great realities of nature; nor will the ordinary mind be unimpressed with the greatness, wisdom and benevolence of Him who made the whole.

The want felt in this region, is that which lends additional enchantment to the scenery of the Alps and the hills of Westmoreland. There are no lakes in the Darjeeling territory. The rivers too, which in the rains are roaring and blustering streams, become in the dry season mere gently flowing and erratic brooks.

The taste displayed by the residents in the selection of sites and the laying out of their grounds, gives a minor grace to the scenery. It would be impossible to enumerate all, but we cannot pass by Brianston, the residence of B. Hodgson, Esq., late of the Bengal Civil Service.

Both as it respects situation and taste, Brianston is a gem of a mountain home. Its broad acres tastefully arranged, and its rustic bungalows, prove that it has been the product of an intelligent and tasteful mind, of one who has determined to make the Himmalaya not only the field of scientific research, but his home. The hospitality manifested by the proprietor of Brianston is too well-known to need more than a passing record. Nor is hospitality confined to this mountain home. If the ennui which must be felt by those who are accustomed to busier scenes can be dispelled by domestic generosity, it will be by the hospitality of the residents in the Darjeeling hills.

The *climate* of Darjeeling is adapted to the generality of European constitutions. The mean temperature throughout the year is 55° to 56°. Equality of temperature both of day and night during the year is a marked peculiarity of the climate. The air, which is keen in the cold, dry season, is pure during the entire year. The people dwelling at Darjeeling may in the course of a few hours have almost any temperature they please. A descent of one or two thousand feet will take them from the cold breezes of the Jellapahar to the more genial stations on the lower slopes, and in the neighbouring valleys, the old Indian may luxuriate to his heart's content in a climate almost as warm as that

of the plains. The valleys are not, however, the most salubrious locations; want of free circulation engenders fever, and other diseases common to low and sultry localities.

The year may be divided into two parts, the rainy and the dry seasons. The rains commence about the middle of May, and continue until the middle of October. The rains in the hills are regular down-pours; they come down in right good earnest. Owing to the slopes, and the porous nature of the soil, the water does not long remain on the surface, it is soon either absorbed or finds its way by the mountain streams to the beds of the rivers. A short interval of sunshine serves to render the ground dry, and gives a good road on which the pedestrian or equestrian may take his accustomed rambles. When during the rainy season there is a temporary cessation of the rain, the climate is exquisite and the atmosphere clear and brilliant. The dry season commences in October, and continues until May. January and February are very cold, with almost daily frost. March, April and May are the dry and warm months, or spring period; when beautiful, sweet-scented flowers and indigenous fruits make their appearance. The following extract from the Darjeeling Meteorological Register shews the mean temperature and fall of rain from 1853 to October 1856:—

Extract from the Darjeeling Meteorological Register, mean temperature and fall of Rain from 1853 *to* 1856.

Months.	Height of Instruments above the level of the Sea, 7168 Feet.								Average.	
	1853.		1854.		1855.		1856.			
	Mean temp. of day.	Rain.	Mean temp. of day.	Rain.	Mean temp. of day.	Rain.	Mean temp. of day.	Rain.	Mean temp. of day.	Rain.
January.....	36.79	1.85	45.85	.10	39.42	.10	40.99	1.78	40.76	.96
February...	47.23	.75	42.01	1.57	41.93	2.03	45.57	.00	44.18	1.09
March	52 83	.00	51.47	.40	49.36	2.94	52.84	1.38	51.62	1,18
April	57 74	1.00	53.83	5.10	52.58	5.76	56.41	1.15	55.14	3.25
May	61 35	2.07	59.73	5.68	58.70	11.65	58.00	1.18	59.44	5.14
June	64.34	26.90	62.96	40.57	60 88	21.21	61.37	45.95	62.34	33.40
July	65.26	29.49	65 81	18.55	62.24	21.76	62.53	34 77	64.03	26.14
August.....	64.13	31.26	65.41	40.91	61.97	26.54	61.69	37.61	63.30	34.08
September.	62.02	20.15	63.55	28.10	60.42	15.80	61.18	17.51	61.80	20.40
October	56.71	4.34	58.52	4.05	56.20	.02	59.18	15.90	57.65	6.08
November..	49.28	.37	49.47	2.10	49.52	.41				
December...	45.29	.00	45.14	.20	47.56	.00				
Means ..	55.24	9.85	55.29	12 28	53.39	90.2				

Lat... ..... 27° 2′ 53″ N.
Long ..... 88° 18′ 41″ E.
Mag. Var. ... . 2° 30′ E.

Correction for Corresponding Greenwich time.— + 5h. 53m. 14¾.

The soil is stiff red or yellow clay, with Gneiss rock lying under it, and in some places coming to the surface. Gneiss crumbled in the form of sand is met with in different parts of the hills. Where the jungle has not been cleared, there is a fine surface soil of vegetable mould, ranging from six to twelve inches in depth. This yields one or two fair crops; when however the vegetable soil is washed away by the rains, little is left but the primitive clay; with here and there the bald rock standing out. The only minerals at present found in the hills are copper, iron and manganese; they have not however, as yet, been found in sufficient quantities to remunerate the miner. Lime is found in the valleys.

The prevailing winds are E. to S. E., during the cold and dry season; and from S. to S. W. during the rains. It rarely blows from the north, the snowy range being a barrier to the wind in that quarter.

The Darjeeling territory abounds with the following timber, fruit and flowering trees and plants—Oaks. There are several species of the oak. Five are known as yielding good timber. The oak of the Himmalaya cannot however compete with the sturdy British oak. The damp appears to deprive it of the strength and durability for which its English namesake is famous.—Chesnut. This is an excellent wood, and is used for building purposes. The nut is small and sweet.—Birch—two species.—Maple, two species. Sal.—This tree, which is one of the best Indian woods, grows abundantly in the neighbourhood of Punkabarria. It is also found on the other side of Darjeeling, near the Runjeet. Sissu—grows in the valleys of the Ballasun and Runjeet. Toon—grows to a large size in the lower districts. The Wild Mango—grows between Kursion and Punkabaria. The fruit is small and cylindrical in form, it has not much of the flavor of the mango of the plains. Rhododendron—white and red. The latter is found only at Darjeeling, the white is in great abundance lower down. It grows to a gigantic size, and flowers in April and May. The wood is white, light and durable. Walnut.—This is a very handsome wood and is used for furniture and house building. Champ,—a yellow cross-grained wood, excellent for ceiling, flooring, chimney pieces, and doors and windows. Magnolia—a large handsome tree, white flowered and highly scented, flowers in the spring, scenting the air with its fragrance. Lotus tree—a large handsome tree, flowers in the spring; it bears a profusion of large, lotus-like, pink flowers—when in full bloom this tree is really the Queen of the forest; it belongs to the genus Magnolia. Sycamore,—somewhat like the Plane tree. The wood is good. The natives use the leaves as a substitute for tea. Holly—this is a large handsome plant, and especially in the winter, when it is in full leaf, and its branches are covered with scarlet berries. There is a species of Olive, the fruit is as large

as a plum. The wood, though not durable, is used for door-posts and out buildings. Semul—well known in the plains for its cotton. It grows at an elevation of 3,500 feet. Figs,—two species, edible, they ripen in August. The Pimento tree bears a spicy berry, which has somewhat the flavor of strong orange peel—it is used medicinally by the natives. The Paper tree,—three species, the yellow, white and pink and scarlet flowered. The yellow flowered thrives at an elevation of about 5,000 feet. The paper made from this tree is coarse and dark coloured—the whitish pink is abundant; this thrives in a belt embracing 2,000 feet of elevation, that of Darjeeling, 7,257 feet, being the centre—it is the most abundant of the species. The scarlet flowered is found on higher elevations, such as the Sinchal. Olea Fragrans is abundant about Darjeeling, it is sweet scented and flowers in October. Firs are found near the Runjeet. Wild cherry is abundant below Darjeeling. The Barberry is indigenous to the district, the fruit is equal to British fruit, the wood is green and is used for dyeing purposes.

There is a yellow, durable wood, very offensive when fresh cut, called in "the Darjeeling Guide," Stink Wood. The Tea Plant.—This is not indigenous to the Darjeeling district. It was introduced by Dr. Campbell. A few healthy plants are found in the station, the seeds are large and well formed, the leaf is large and coarse. The elevation of Darjeeling is too high for the plant to be very productive; besides which it must suffer from the frost. Tea plants have been sown and raised on the lower slopes, at Tuqvar, to the north, by Captain Masson, at Kursion by S. Smith, Esq., and tea is now being raised at the Canning and Hope Town plantations by the Companies attached to those locations, by Mr. Martin on the Kursion flats, and by Capt. Samler, the agent of the Darjeeling Tea Concern, between Kursion and Pankabaria. There can we believe be little doubt but that the tea plant will thrive at an elevation of from 3,500 to 4,500 feet. The managers of Hope Town Tea Concern have been obliged to increase the number of shares, to meet the calls made upon them by parties interested in the project. This concern is indebted for its prosperity to the energy and skill of F. Brine and E. D'Cruz, Esqs. Should these tea plantations succeed, and we see no reason to doubt their success, they will be a great boon to the Darjeeling district, as well as highly remunerative to those concerned. With a view to encourage the growth of tea by the natives, the Government has placed at the disposal of the Acting Resident, Capt. James, several maunds of tea seed for distribution amongst the indigenous agriculturists. It is an experiment worth trying; but we doubt whether the erratic disposition of the Lepcha farmer will allow him to wait four years ere he realizes the fruit of his labours.

The coffee plant has been sown below Kursion, and gives promise of fruit. The soil and climate is favorable to the production of the plant, and if there be sun enough to ripen it thoroughly, there is good hope of success with coffee as well as with tea. We have seen and tasted tea grown near Darjeeling, which to our taste was more palatable than the produce of the Assam tea plantations.

There are five species of raspberries—three of tolerable flavor. They require cultivation to give them a higher flavor. Strawberries are grown by the residents; they are well flavored, a little more acid than the English fruit. They are nevertheless a great treat to those who have so few opportunities, in the plains, of tasting this queen of fruits. Apples, pears, and plums, have been introduced by the residents. They do not, however, arrive at perfection. The trees are healthy, and the fruit well formed, but they need sun to ripen them into the mellow flavor of the British fruits. Peaches are grown, but they are hard and bitterish to the taste. They, like the apple, require more sun than Darjeeling can afford. It is probable that these fruits of the Western world may arrive at greater perfection in the lower ranges, such as Kursion and other spots at the same elevation. Besides the trees mentioned, the Elder, Hydrangia, Bramble, Honeysuckle, Camelia, and the Ivy, and different kinds of climbing plants, are found in great abundance at different elevations. A wild purple grape grows on the lower slopes. It is a pleasant fruit, and makes a jelly with somewhat of the flavor of the English damson; if cultivated it would we think grow to a much larger size, and might probably produce a common kind of claret.

The Floral world is abundantly represented. Many common English wild flowers bring back to memory the hills and dales and shady nooks and lanes of the fatherland. The fox-glove, daisy and butter-cup, with others of the same order, greet the eye in the spring season. The daisy, though not indigenous, flourishes at Darjeeling. The English primrose is not found in the hills, but a plant with a palish pink flower, called the Sikkim primrose, is abundant in the neighbourhood. The English cabbage rose, imported, and others indigenous to the hills, attain to great perfection, one species of rose which flowers in the spring, deep crimson and well-scented, grows very profusely. Fuschias of two kinds grow to a large size. A large variety of flowers, including two or three varieties of violets, and indigenous to the hills, are continually developing their beauties and making the air aromatic with their fragrance. Ferns are found in rich variety, from the most minute of these feathery plants to the stately and graceful Fern tree. The bamboo is found in the valleys, and up to six thousand feet, in great variety; the dwarf species is abundant between

Darjeeling and Kursion. Some of the species grow to a large size, and as in the plains so in these hills, the bamboo is a most useful plant. It is used by the natives for almost every purpose. The water carrier makes his chunga out of the larger ones; and in the same form it is employed by the natives for carrying milk, butter and all similar produce. The leaves of the younger plants are used as food for horses and cattle. The Orchid race is largely represented—many beautiful species are found in the Darjeeling territory. They find a home on the large forest trees, and not unfrequently on their very topmost branches. In the depths of the forests they, with a number of the fern tribe, attached to huge trees and gracefully festooned by luxuriant climbers, give to the forests an elegant and refreshing appearance. Man, if he felt disposed, might well make some of these shaded forests, temples in which to worship Him who made them all.

The Darjeeling potato has earned for itself a name in India. It is well flavored, and when diligently cultivated, a good specimen of the root. It finds a ready market in the plains, and only needs care in the cultivation to become a general favorite. With a view to get the potato down to the plains early in the season, we apprehend it is often gathered before it is fully ripe. This gives it a darkish appearance, deprives it of some of its flavor, and often causes it to sprout. The seed transferred to the plains, the largest and best kinds being selected for seed, and the ground well manured, produces a larger potato than we generally find in the hills. The Darjeeling farmer should look to this. Murwah is extensively grown by the natives. This plant produces a small seed, which when fermented makes a drink which is most popular with the people of the hills. The seed is put into a chunga or bamboo bottle, hot water is poured into the bottle, and allowed to remain until the seed is well soaked, the liquor is drunk hot, through a reed or bamboo pipe. Murwah is an intoxicating drink. It forms a part of the daily rations of every native in the hills. It seems when taken as an ordinary drink to induce pleasantry; but like all intoxicating beverages, when taken in large quantities, it leads to drunkenness with its accompanying evils. The taste of Murwah is something like Sweet Wort, the juice of barley prepared for brewing purposes in England. Connoisseurs in Murwah, when they wish to make it more exciting, give it a spice of some pungent condiment.

Bhoota or Indian corn is extensively cultivated by the natives. It grows to a large size, and yields generally an excellent crop. It finds a ready sale in the hills. It is used as food for horses and cattle. The natives pound it and make from it a not over diges-

tible cake. The castor oil and pawn plants grow wild at Kursion and in other spots at the same elevation. Castor-Oil and Indigo might both be grown at Kursion and Punkabarria for seed. The produce would find a ready and remunerative sale in the plains. Munjeet and cotton both thrive in the Terai—the latter is being more extensively cultivated every year—the whole Terai if cleared might be made one vast cotton-growing country.

Darjeeling produces good specimens of both native and imported vegetables;—the latter, such as rhubarb, cabbages, peas and beans, are large and upon the whole well flavored. The rhubarb is especially good—the other vegetables have not quite the rich flavor which their home name-sakes possess: this in all probability is owing to the moisture of the atmosphere, and also to the fact that the land after a while requires to be well manured.

The native vegetables are not numerous; the mountain yam is a mealy well flavored vegetable. It grows to a large size, weighing often from one to two seers: the Kachu, a soft watery yam, a species of colocinth, ripens in the autumn. It is used by the Lepchas as a purgative.

There are also aromatic and medicinal plants, the virtues of which are as yet known almost only to the natives. Oils and essences have been extracted from some of the hill plants by amateurs; and may probably yield a profitable return to those who bestow more labour in the preparation of the extracts. Grasses of different species, and some of exquisite formation, are found at certain elevations. The indigenous grass is large and coarse, and does not appear to be very nutritious. English grass has been introduced. White clover imported is now no rarity. Some of the slopes in Darjeeling are, in the spring, covered with its sweet-scented flowers, giving the homestead of the residents the appearance of an English farm. Not a stem of red clover rears its head amongst the white, nor have the English primrose or cowslip found their way to Darjeeling.

Butterflies of every size, shape and hue, and moths small and gigantic roam about in this fairy region. Nothing can exceed the beauty of some of the butterfly tribe. Nature appears to have exhausted her skill in their formation and coloring. Nor are the moths less elaborate in formation, though not so pleasing to the eye. The Lepchas are great butterfly hunters. They sally forth with a muslin bag at the end of a bamboo, and give chase to these aerial beauties over brake and dell in the valleys of the Runjeet and Balasun, returning with their spoil for sale to the visitors at "the Bright Spot." The average price of these captured beauties, if taken promiscuously, is sixty for the rupee, and thirty or forty

if the choice ones are picked out. The butterfly hunters have of course their tales about some of their wards. One of them refers to the moth. They say that there is one species so large that the man who catches it is sure to die; no one however has seen this wonderful moth. It is a legend which has doubtless been handed down from generation to generation, a sort of bugbear with which to frighten the young and the timid. Sometimes a large and rare species of butterfly will realize a large price; we heard of one which was sold for twenty-two rupees. Beetles of singular forms and hues are also abundant in the territory.

In the valleys, birds of rich plumage are found in considerable variety. On the upper ranges, an occasional brace of black eagles may be seen soaring aloft, and a few birds of prey of smaller size are indigenous to the region. Song birds are not numerous at Darjeeling. The thrush discourses sweet music in the spring; the cuckoo, with its once familiar note, comes in April and May; and a species of blackbird hops about, but does not sing often; and a small blue canary chirps in the trees when the flowers begin to bud. Sparrows and crows are, as the Americans have it, sparse; they are not indigenous—they were introduced by Dr. Campbell. Pheasants of exquisite plumage are numerous; and partridges are found, but not in great abundance. Porcupines, bears, wolves and jackalls are indigenous, bears are numerous and sometimes commit great depradations on the Bhoota farms. There are other wild animals, and some of the feline genus beautifully marked.

Fish abounds in the rivers, but little of it reaches Darjeeling. The Maha-seer, and some small mountain-stream fish are brought to the station either from the Runjeet or the Balasun by the natives. Fish however is not abundant at "the Bright Spot." Fishing is by some pursued as a recreation at the Runjeet. Bees abound in the forests. Honey and bees' wax, gathered by the natives, are brought into the station for sale. The honey is of a rich flavor and congealed. The wax when clarified is of fine quality and finds a ready sale. It is brought in by the natives in cakes of a dark dirty color, and sold for a rupee a seer. Milk and butter are of the first quality and cheap. Twenty quart bottles of milk can be obtained for one rupee. From the milk bought at the door, people sometimes make their own butter. The process is simple and cheap. A preserve bottle is the churn, in which the cream, is well "shaken before taken" out as butter.

The cattle produce of the territory and its neighbourhood consists of the Sikkim and Nepal cow, ponies from Thibet and the plains, sheep, some indigenous, others imported from the plains,

and pigs. The cows are well formed, and about the size of good sized English cows. They do not equal the English cow in the quantity of milk they give; the quality is however good, and creams well. The cows feed in the jungle, and the milk has sometimes a taste of the aromatic plants on which they feed. The hill sheep is large boned, and when brought in by the natives is not over well fed. The beef and mutton has not the flavour, nor is it so tender, as that of the plains: but a good appetite, added to a few days' keep, makes it very palatable. Pigs appear to thrive in the hands of the caterers for the public appetite. The pork is well flavoured, and when cured makes excellent corned pork. The Darjeeling hams are not unlike the small Yorkshire hams, and when carefully cured, find a ready market in the plains. A good ham, of from eight to ten pounds, may be bought in Darjeeling for from three-eight to five rupees. Poultry is scarce; the supplies are generally brought up from the plains. Ghee is abundant in some parts of the hills; and especially in the Nepal district, it is of fine quality and of reasonable price. It might be turned to profitable account by the Darjeeling farmers.

Mineral springs have been found in the Darjeeling district. Two of these "medicine wells" have attracted attention. The first to which the notice of the residents was called is Menchu, or the "medicine water." This is situated in the valley of the Rungnoo, about six miles from the station. Its medicinal virtues had been long known to the natives. They had resorted to it for the cure of rheumatism, cutaneous and scrofulous diseases. Their mode of administering the water was twofold—the hot bath, this they prepared by damming up the water and throwing in hot stones: in addition to the bath they drank the water and cooked their food with it. The same plan has been adopted by their more civilized neighbours, and in some instances with considerable success. Cases have been cited in which considerable benefit has been derived from a residence at Menchu. The water has been sent to practical chemists in Calcutta, to be analysed and reported upon. As in almost all similar cases doctors have differed. The first report was to the effect that the Menchu water contained iron and sulphur and other medicinal substances in small proportions: the last report pronounced it only the very purest water: both reports however may be to a certain extent correct. Every thing will depend on the season when the water is procured. If it be obtained in the dry season its real properties will be developed; if in the rains, it must, from the porous nature of the soil, and the large and

constant fall of rain, be so diluted as to be little better than the ordinary water found in the mountain streams. One thing is clear, whatever the chemists may report, that some persons have derived considerable benefit from a residence at the springs. The natives, the children of nature who seldom err in these matters, have looked upon the Menchu spring as medicine water. Another spring has been discovered a short distance from Menchu, on which the resident medical men have reported favorably. Water from a third spring in the centre of the station has been sent to Calcutta and has been analysed. It contained a considerable portion of iron, a trace of sulphur, and carbonates considerable. This was the result of a rough analysis. There can be no doubt but the Darjeeling hills abound with similar springs, some of which may be probably more impregnated with medical virtues than those at present discovered—a better acquaintance with the country, and more patients benefited by the waters, will however soon set this, at present debateable, matter at rest: Chemists like Doctors are not always infallible, and one cure is better than a a dozen theories.

The Resident is invested with almost supreme authority, in matters Judicial and Civil. An order in Council, dated 4th September 1839, contains the rules, twenty-one in number, for "regulating the assignment of locations and grants of land in the Hill Tract attached to the station of Darjeeling, and for the administration of the said Tract." These rules, says the Report on Darjeeling, speak of the Superintendent "as the officer in Civil and Political charge at Darjeeling." "The police and magisterial authority will be exercised by the officer in Civil and Political charge." Rule 4 declares "The officer in Civil charge is vested with the power and authority of Civil Judge in respect to all claims, complaints and disputes that may arise, and be cognizable in the Civil Courts of the settlement, under the Acts and Regulations in force in the Bengal Presidency." These were all the regulations originally given to the Superintendent for the government of a tract of country covered with dense jungle, and in which he had to administer Civil and Criminal Justice and Police, and to collect Revenue. Other instructions, principally suggested by Dr. Campbell, for the collection of revenue, have received the sanction of Government. The Acts and Regulations in force in Bengal, happily for the Darjeeling district, have never come into operation in the territory. With this simple code the territory of Darjeeling has, from a tract of jungle and forests, become a thriving country, an important Frontier Station.

The Revenue from land as given by the Report is as follows :—

Total Jumma of Morung	30,761
Deduct cost of Collection	3,034
Remainder	27,727
Total Jumma of new Hill Territory, no cost of Collection	140
Total Jumma of Hill Territory appropriated to local purposes, no cost of Collection	6,025
Total Jumma of Darjeeling Territory.....	36,926
Total cost of Collection, 8 per cent.....	3,034
Net Income .....Rs.	33,892

"The income of the Hill Territory, Rs. 6,025, is appropriated to local purposes by order of Government. The income of the territory in the hills and in the Morung, according to the new settlement, is Rs. 27,867, this is the clear revenue derived from the district by the state and available as income."

The following statement of the Receipts and Expenditure connected with the Treasury, for the whole territory, will serve to show what a change has been wrought in this once jungly and unproductive district :—

In 1852-53.

Receipts.		*Disbursements.*	
Cash for Drafts issued ...	1,23,210	Executive Department Assignments	37,217
Ditto for Land Revenue .	26,773	Post Office.....	8,032
Ditto for Abkaree	2,228	Drafts Revenue and Military Department ...	1,62,055
Ditto for Post Office	10,253	Audited Bills	74,362
Ditto for Fines	558	Pension	8,000
Remittances from other Treasuries	1,54,000	Interest on Loan Accounts	1,253
Stamps	621	Miscellaneous	26,259
Miscellaneous	19,581		
Total Rs....	3,37,226	Total Rs....	3,17,180

The number of civil suits decided during five years, according to the Report, was five hundred and one; or an average of one hundred suits a year. The number of criminal cases decided during the same period was one thousand four hundred and twenty-two. The number of prisoners sent up for trial in 1852, was four hundred and fifty-one,—convicted, one hundred and seventy-nine,—acquitted, two hundred and seventy-two. The

report estimates the entire population of the district at ten thousand. The entire income derived from the territory is estimated by the same authority at fifty thousand rupees.

The following statistics will show the state of crime amongst the natives and the nature of the crimes to which the people are addicted. In 1852, there were petty affrays 57, abductions 37, false imprisonment 8, assaults with wounding 5, child stealing 1, burglary, aggravated, 4, cattle stealing 22, thefts 60, plunder of houses 4. Not a solitary case of murder occurs in the list, and the graver offences against the laws are comparatively few.

The vigilance of the police must exceed that of the plains if the following statistics of property stolen and recovered be a standard by which we may judge :—

	Value of Property stolen.	Value of Property recovered.
1850.....	3,045	2,096
1851.....	2,460	1,237
1852.....	2,219	329

It is a singular and strange fact that the language in which the official business of the Court is transacted is Bengali, and this in a Court where the bulk of the people are almost as ignorant of that dialect as they are of the language of Timbuctoo. This, at least, whatever else may not need it, requires reform.

We have referred to trade with the neighbouring countries, and especially with Thibet—the people of Thibet are believed to be well disposed towards the British Government. The Chinese Government, with whom rests the appointment of the officials at Lassa, is not favorable to free trade with outside barbarians, and has done all in its power to prevent intercourse between the two countries. Previous to the disruption with Sikkim, through which country the high road to Lassa passes, the influence of the Chinese Government in Thibet had been much weakened. The value of the imports from Lassa to Darjeeling by this route was estimated at 50,000 Rs. annually. On the high road from "the Bright Spot" to Lassa are two large towns, Phari with a population of 4,000, and Geanchee Shubur with a population of 20,000.

The imports from Thibet consist of salt, gold, silver, precious stones, and coarse woollen stuffs. The principal import is wool. The flocks of Thibet are very numerous, and the wool is of the

finest quality. It is as fine as Merino with a much longer staple. The Report treating on this subject says :—

"The fineness of this wool is attributed to the same cause as that of the merino ; the fine and succulent short pasture of the Thibet hills, while the cold climate has the usual effect on the fleece of supplying that peculiar quality which is found in the shawl wool of the Thibet goats. The high plains on which these numerous flocks feed are of immense extent, and if the importation of the article could be facilitated, it would become a source of profit to our speculators and manufacturers, and of riches and civilization to the Steppes of Thibet, which have been hitherto excluded from all possibility of improvement by the rigid application of the exclusive policy of the Chinese. The nearest road to Lassa from the British Territory lies through Darjeeling by the Choombi Valley, and the towns of Phari and Geanchee Shubur already mentioned, as forming the present line of traffic : the distance about 500 miles, of which 70 miles in Sikim as far as Choombi. The Thibetan institutions are such as to admit, without difficulty, of the establisment of a consul of a foreign nation at Lassa for the protection and control of the foreigners carrying on trade there. I am informed that Lassa is visited by people of all the neighbouring nations as merchants. The merchants of each nation appoint their own consul as the medium of communication with the Thibet Government, and to settle their own disputes without reference to the Government of their own country. The Nimals of Nepal, the Cashmerees, the Ladakees, and the people of Bootan have all headmen or consuls of these descriptions in Lassa, as well as other States lying between China and Thibet. If, therefore, the traffic of Thibet could be extended by improvement of the communication, it would be easy to effect a commercial establishment in Lassa, if the opposition of the Chinese power, now so much on the wane, could be once got over."

The Lassa merchants are about a month on the journey from that place to "the Bright Spot." The traffic between the two countries shows how important it is for the British Government to obtain, once more, a free passage through the Sikkim country.

It is but natural that we should briefly touch on the diseases prevalent in the Darjeeling territory. The following medical statistics for eight years in connection with the convalescent Depot give a succinct and clear view on this subject in connection with European ailments :—

Table showing the Strength of the Depôt, Mortality, &c., since its formation in 1848.

Years.	Strength.				Deaths.				Invalided.				Proportion of Deaths to Strength.	Percentage of Deaths to Strength.	Average Strength during each year.	Diseases of those men who have died duing each year.											Total number of Deaths during each year.
	Officers.	Men.	Women.	Children.	Officers.	Men.	Women.	Children.	Officers.	Men.	Women.	Children.				Anasarca.	Bronchitis.	Cynanche Tonsil.	Diarrhœa.	Dysentery.	Febris Remittent.	Hepatitis Ch.	Hematemesis.	Phthisis Pul.	Paralysis.	Syphilis Con.	
From 1st April 1848 to the 1st April 1849	3	43	3	2	...	6	...	...	...	1	...	...	6 to 71⅔	8·32	71	...	...	...	...	2	...	2	...	...	...	2	6
Ditto Ditto 1849 Ditto 1850	3	73	5	4	...	8	...	...	...	...	...	...	8 to 85	9·35	56·84	1	...	...	...	3	1	2	...	...	1	...	8
Ditto Ditto 1850 Ditto 1851	5	107	8	7	...	2	...	...	...	...	...	...	2 to 127	1·73	70·88	...	...	...	...	2	...	...	...	...	...	...	2
Ditto Ditto 1851 Ditto 1852	4	96	21	24	...	6	...	...	...	...	...	...	6 to 145	4·20	103·72	1	1	1	...	1	...	...	...	2	...	...	6
Ditto Ditto 1852 Ditto 1853	3	72	2	...	...	1	...	...	...	1	...	...	1 to 77	1·27	75·20	...	...	...	...	...	1	...	...	...	...	...	1
Ditto Ditto 1853 Ditto 1854	8	136	4	5	...	6	...	...	...	6	...	...	6 to 153	2·38	77·86	...	...	...	2	1	1	...	1	1	...	...	6
Ditto Ditto 1854 Ditto 1855	5	74	4	8	...	1	...	...	...	12	...	...	1 to 91	1·09	72·9	...	...	...	1	...	...	...	...	...	...	...	1
Ditto Ditto 1855 Ditto 1856	4	68	3	7	...	1	...	...	...	12	...	...	1 to 82	1·18	68·2	...	...	...	...	...	...	...	...	1	...	...	1

The following table shows the rate of mortality amongst the native prisoners in the Darjeeling jail, and also amongst the Sebundy Corps during the years 1853 to 1856 :—

Prisoners in the Jail.

1853.	1854.	1855.	1856.
3 Deaths occurred. 2 By Dysenteria Chro. 1 By Diarrhœa.	1 Death occurred. By Febris Quodn. Intermittent.	8 Deaths occurred. 1 By Febris Tertian. 2 „ „ Remittens. 2 „ Dysenteria Acute. 1 „ „ Chron. 1 „ Coma. 1 „ Cachexiœ Syphiloides.	1 Death occurred. By Diarrhœa in September last.
Average daily strength .. 38.11 Average daily of sick 6.2	Average daily strength .. 37.91 Average daily of sick 6.52	Average daily strength .. 45.65 „ „ of sick .. 6.65	

Sebundy Corps of Sappers.

1853.	1854.	1855.	1856.
3 Deaths occurred by Variola.	1 Death occurred by Splenitis.	1 Death occurred by Enterites.	No Death.
Average daily strength .... 210 Average daily of sick..... 3.04	Average daily strength .... 209 Average daily of sick 5.7	Average daily strength.... 209 Average daily of sick 5.21	

The natives are subject to slight fever, dysentery, rheumatism, small pox, and other diseases common to genial but humid climates. Darjeeling is not the best climate for pulmonary complaints; nor is it a desirable residence for persons at all affected with rheumatic affections, or indeed for any troubled with complaints to which humidity is an ally. The effect of the climate on the majority of constitutions is in the highest degree favorable. A very brief residence enables the invalid visitor to shake off his weakness and his ennui. He becomes buoyant and cheerful; new life is sent through his veins like magic. The residents generally are pictures of robust health. For some constitutions it is better adapted than the colder climate of Britain. In cases however of complete prostration we believe that the Darjeeling hills will not supply the place of the bracing and invigorating climate of Europe. It would at least require as long a residence in the hills as it would in Europe, in which case we suspect the majority of invalids would prefer Europe, with its home associations, advantages and excitement. Man is so constituted that he needs something more than climate to

restore him mentally and physically after a long and weary residence in the wasting plains of India. For an agreeable and invigorating change to persons weary of the plains, or to those on whom disease has not fastened his chronic hand, we can think of no better spot than Darjeeling, while for old Indians who intend to make the East their home, or for enterprising people with agricultural tendencies, the Darjeeling hills offer a prospect than which nothing can be more pleasant or hopeful.

For children Darjeeling is indeed "the Bright Spot." Its climate is really the children's friend. If blooming, rosy faces, healthy bodies and buoyant spirits be a boon to the young, they have them all in Darjeeling. We doubt whether any English village could produce such a fine show of robust and healthy children as the station can display. It is quite a treat, after being familiar with the pale faced little ones of the plains, to meet the joyous, merry-faced urchins in the hills. Their faces vie in colour with the blushing roses of their own fair gardens. In proof of the adaptation of the hills to the constitutions of children, we may mention that the Roman Catholic Nunnery has been established upwards of ten years; during that period but little serious sickness has visited the pupils, and not one death has occurred within its walls. The pupils are all from the plains, and generally are sent up in a weak and sickly state.

The religious condition of the hill tribes has not been overlooked by Christian philanthropy. The Rev. W. Start, a truly good man, who has been the means of introducing several excellent Missionaries into the field of Missions in North India, while on a visit some years back, resolved on establishing a Mission at Darjeeling. His chief object was the conversion of the Lepchas.

Mr. Start brought out from Europe a small staff of German artizan Missionaries, and located them in Darjeeling and its immediate neighbourhood. His idea was that the Missionaries should after a time support themselves by engaging in agricultural and other secular pursuits. The plan, from causes which we need not discuss, did not answer, and the Mission now consists of one Missionary, who labours chiefly amongst the Lepchas.

There was in former years a school connected with the Mission for Lepcha children. It is at present discontinued. A Grammar of the Lepcha dialect has been compiled by Mr. Neible the Missionary: portions of the Holy Scriptures have been translated into the Lepcha tongue, and a few smaller publications have been published and distributed amongst the people. In addition to Missionary labours Mr. Start preached for some years, and before a chaplain was appointed to the station, to the Christian popula-

tion, in a chapel built at his own cost, and free of all charge to the people. This is the only attempt which has been made to propagate the knowledge of the Gospel amongst the hill tribes.

We think as a centre of influence for Christian missions Darjeeling is a station of importance, and ought not to be lost sight of by the Christian Church.

The people resident in the Darjeeling territory are the Mechis, the Lepchas, the Nepalese and the Bhooteas. There are a few other mountaineers scattered here and there in the district, such as the Garrows, the Dimals and Lharrahs. Their neighbours are the Limboos, Murmis, Haioos and Kerautis. The first named tribes however form the staple of the population of the Darjeeling hills.

The *Mechis* inhabit the Terai district. They are seldom if ever found at an elevation higher than one thousand feet. Their cast of countenance is Mongolian, accompanied by a squalid softness of outline, which distinguishes them from some other of the mountain tribes of Mongolian origin. They are migratory in their habits. Though living in the Terai, which is so fatal to strangers, they are generally healthy. Their chief occupation is clearing the Terai: on the clearances they cultivate cotton and rice, and graze buffaloes. Of religion they have but a very slender knowledge. The little they have is of the Shivite form of Hinduism. The Brahmins have no influence over them, and they have no *Gurus:* priests they have none, nor have they any temples: they perform no *Shradh*. They bury their dead in some convenient part of the jungles. Their funeral obsequies consist in feasting and placing food on the graves of the dead. They are a dirty and easy living race, and rank very low in the scale of human society. They have no caste, eat fowls, buffaloes, cows, and the carrion of all animals, the elephant excepted. They have too much respect for the *hati* to serve him up as food. Their marriages are contracted at an early period of life and at convenience. The men purchase their wives, at prices varying from ten to sixteen rupees. If the bridegroom cannot pay for the bride in cash, he works for her parents until he has earned his prize. Beauty is the standard by which the price is regulated. The women, besides attending to the household duties, take their full share with the men, in the labours of the field. The Mechi language has no written character. It is doubtful whether it is of Thibetan or Burmese extraction, or whether it has a common origin with that of the Coles and other aboriginal wild tribes of India. The probability is that it is a compound of different dialects.

The *Lepchas* are the aborigines of the Darjeeling hills. They are divided into two races, the "Rong" and the "Khamba." They have a written language but no history, legends, literature,

books or manuscripts. They appear to have little if any tradition as to their origin or how they came into the hills. The only tradition which we could gather was that they came from a neighbouring district, and that their ancestors came from the top of one of the mountains—a faint tradition of the story of the flood. They are evidently of Mongolian origin.

Their expression of countenance is, when young, pleasing. It is soft and feminine. They are a cheerful, apparently contented people, with few wants and little or no anxiety; and as dirty in their persons and habits as a people can well be. They are migratory and very erratic in their mode of living, seldom continuing more than three years on one location. Some of them take service in the families of the residents and visitors, but they are seldom be depended upon. Love of change is so inherent in their nature that they will flit in a night without rhyme or reason from one family to another. Their occupation is chiefly as chair bearers or house servants, they will not work as coolies. The religion of the Lepchas, such as it is, is in form Budhist. They appear, however, to give themselves but little trouble on religious matters—they are evidently timid and superstitious, fear their priests and evil spirits. Their concern religiously is evidently to avert evil. "If God be good" they say "he will not harm us, 'and why should we trouble him, our business should be to avert 'evil." We were informed by one well able to offer an opinion on the subject, that they have no word in the language to express the idea of the Supreme being: they only refer to some attribute of God, and not to God himself.

The dress of the Lepcha is graceful, it is quite an oriental Highland costume—their food is coarse and their cooking not over-delicate. The women labour as much if not more than the men: they, unlike the majority of oriental women, walk abroad as do the women of the western world. Every Lepcha carries a formidable knife in his belt. It is used for every purpose, from cutting a potatoe to clearing the jungle. In the hands of a Lepcha it is a powerful weapon. Marriages are contracted in mature life: the bride is purchased. Previously to marriage the women are not strictly bound to chastity, after marriage it is rigidly enforced. The Lepchas bury their dead; they have a great dread of death; they are a healthy race, and notwithstanding their dirty habits are remarkably free from the ills which flesh is heir to. They have little taste for music, and unlike most mountain tribes have but few musical instruments. Their singing is a sort of low chant, and not at all ungrateful in their mountain solitude. They have no towns and but few villages. They often perch one or two houses on the brow of a hill or some cleared spot, where at night its fire light shines like

a dim star. The Lepcha is fond of a forest life. In excursions into the interior he is an excellent companion and a good servant. He is then in his element and appears to be quite in his glory. They are an intelligent race and display a good deal of curiosity about things beyond their ken. We once had occasion to spend a few days in the house of a Lepcha Subah or chieftain, and had good opportunities of forming a fair estimate of their domestic character. It was modest, cheerful, courteous, and inquisitive. It was, however, indolent and not over-marked by cleanliness. If the Lepchas could be brought under the influence of Christianity, we incline to think they would be a very interesting and hopeful race.

They have some imagination, and often use in ordinary conversation striking figures: they say, referring to the leaves of the trees on which they eat their food, "we have plates of gold in the morning and plates of silver in the evening."

The *Bhooteas* are unmistakeably of Mongolian origin and Buddhist in religion. They are a more athletic race than the Lepchas. They are a taller, more robust and sterner clan than any in the hills; they are equally if not more dirty than the Lepchas. They are not so amiable or cheerful as their neighbours. They have more of the Chinese nature in them; they are cunning and great cheats, are fond of strong waters, and when under their influence not over amiable. They are the coolies of the hills, and can carry very heavy burdens. Some of the men will carry four maunds, a distance of thirty miles up the hill. The women are also very strong, the old women may be seen toiling up the hill with not very light burdens.

The *Nepalese* are a light and nimble people: they come as agricultural and industrial labourers from the Nepal country. They have a pleasing expression of countenance and are a laborious race: their pay is two annas a day, the day reckoning from seven in the morning till five in the evening. They are in religion Hindus. They are not strictly speaking residents; they come for a while and then return to their homes, to visit their families, who by the laws of Nepal are not allowed to accompany them across the border. Such is Darjeeling, its territory and its people.

In a military point of view it is important. It is an outpost from which the Nepalese and the less numerous and diversified tribes which people the mountains and valleys to the north and east may be watched and held in check. To do this efficiently, should necessity require it, the station must have a stronger military force that it has at present: one hundred and eighty native sappers, with two or three small guns, and one hundred European invalids could do little to protect the territory should occasion arise for de-

fence, much less could such a force attempt anything in the shape of conquest, should it be deemed necessary to strengthen our position on our North Eastern frontier. Happily, however, with the exception of the Nepalese, there is nothing to fear from the neighbouring tribes, and but little if any temptation to make conquest,—except it be the conquest of civilization—in a country so vast in extent, so scantily populated, and with so little to repay the expense of life and property, which invasion must entail.

As a Sanatarium Darjeeling must, so far as Bengal and Behar are concerned, ever hold a very high place. It is the only place, save the broad blue sea, to which the weary and jaded invalid of the plains can look, in this neighbourhood, for renewed health and re-invigorated spirits. Notwithstanding the exceptions we have taken to Darjeeling, we believe it is the greatest boon to the people of the plains which a wise and kind Providence has placed at their disposal; and we only wish that the approaches to it were such as to place it within the reach of all classes of the community. A few years and the railway and a new road now in course of construction through Purneah will not only diminish the distance but lessen the expense of a trip to Darjeeling. When these arrangements have been completed, the resident in Calcutta will be able to reach Darjeeling within a week by easy and pleasant stages, and at a reasonable cost.

As a field for emigration and settlement we look upon the Darjeeling territory with hope. If one of the finest climates in the world, and a country capable of producing the staples which the Darjeeling district has already developed, be at all indicative of success, we think that it affords hope of much better and greater things. Every man who has settled in these hills, with the determination to succeed, has prospered, and there is nothing to prevent the course they have pursued being pursued by many more. We do not say that immense fortunes could be realized in the Darjeeling hills, but of this we are assured that prosperous and happy homesteads, and fair remuneration for honest industry, might be realized. Thriving and healthy families might be reared at comparatively little cost, while in the distance would loom for such families a good, healthful and peaceful homes.

The effect of such emigration on the territory would be only for good. Its resources would be more fully developed, and its traffic largely increased, and instead of untilled valleys, and jungle-covered mountains would spring up on every hand and as far as the eye could reach, small prosperous settlements of an industrious and happy people; the best safeguard of the frontier, and the best gift which civilization and religion could confer on the now wandering and ignorant tribes which people

the countries immediately contiguous. Darjeeling answers a great and good object as a Sanatarium. This however ought to be but the precursor to a far nobler object: such a country, we believe, has been cast in our way for a far higher purpose than that of securing health or recreation for the sick and the weary of the scorching plains of India.

As a field of Missions, the Darjeeling territory should not be lost sight of by those who are interested in the diffusion of Christianity in the east, and especially on our North Eastern Frontier. Attempts have been made in this direction, and though they have not been attended with the success which could have been desired, this is no reason why a more matured and determined effort should not be made to diffuse the knowledge of the Christian faith over this wide and interesting field. Here we have a country bordering on Thibet, and within a month's journey of Lassa its capital on the one hand, and on the other stretching away to the east to the very borders of Burmah and China, with Darjeeling, a most healthy spot, as a centre, from which the rays of Christianity and of civilization might be sent forth to cheer and guide those who sit in darkness and in the shadow of spiritual death. The door is wide; who will enter in and possess the land for Him who is destined to be Lord of all?

With reference to this subject, we may be permitted to remark, that it does not appear to us that the Moravian, or Industrial system of missions will succeed here, or in any part of India. Europeans cannot gain a livelihood as tradesmen in competition with natives, to whom six pence is not merely "a fair day's wages for a fair day's work," but a very large return for it. It is true that a European will do more in a day than a native; but even if he could do double, and earn eight annas, or a shilling, a day, he could not live on that; indeed that would be but a small contribution towards the defraying of his expenses. But we cannot doubt that openings would be found for introducing the Gospel among the natives by preaching, and by means of schools of a humble character, in which elementary education might be given in combination with Christian truth.

With reference to the statement in page 357 of the last number of this *Review* (December 1856,) we are requested to inform our readers that Mr. Seton-Karr is not the author of an article in Blackwood's Magazine on the Indian Civil Service, and that his sentiments on this subject are widely different from those of the writer in that periodical.